



## Activity 1 - See 2.1 in the Workbook.

### 2.2.1 / Let's operate the Computer

We must practise to operate the computer correctly from our childhood. For that follow the guidelines given below.

1

First, supply electricity to the computer by turning on the switch connected to the computer.



2

If the computer is connected to an uninterrupted power supply (UPS), turn it on.



3

Next, the system unit should be switched on.



4

Finally, the monitor should be turned on.



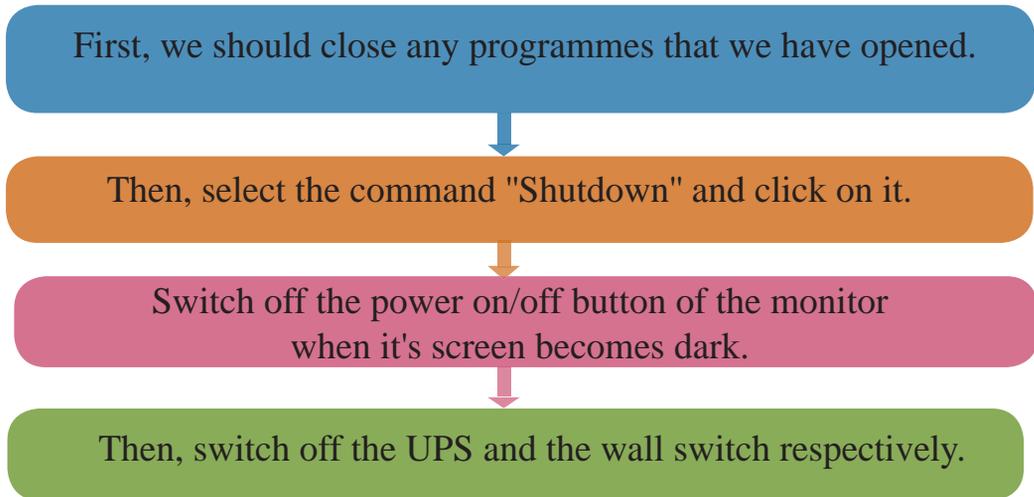
Anyhow, the above steps may differ in modern computers (like laptop computers) which come with a single power button.



Please follow your teacher's instructions at all times since the above steps might be different in your laboratory.



The functioning computers should be shut down in a proper way. Otherwise, the life span of the computer may be shortened.



### 2.2.2 / Let's learn Computer Ethics

“මහත් සෙත් වඩවන  
 සිරිත් මල්දම් බලමින  
 සිරිත් හොඳ දැනගෙන  
 මහත් යසසිරි ලබනු දෙලොවින්”  
 - සිරිත් මල්දම

“Mahath seth wadawana  
 Sirith maldam balamina  
 Sirith honda denagena  
 Mahath yasangiri labanu delowina”  
 - Sirith Maldama

Meaning : Read Sirith maldama. It brings you peace. Learn and practise good values from it and it will bring you good fortune in this life and lives to come.

Dear children, you always get advices to be a good child at home and at school. These advices are called ethics, values, or good customs.

Good practices help to lead a good life. Similarly, there is a set of ethics that should be followed to use the computer properly. They are identified as 'computer ethics'.



### Activity 2 - See 2.2 in the Workbook.

This code of ethics can be considered as a set of guidelines that help you to use the computer properly.



### When we use the computer laboratory...

we must use computers without disturbing others.

we must avoid hacking computer activities of others.

Software which should be used by paying money should not be fakely used or copied.

we must refrain from accessing computer files and articles of others without permission.

we must not repair any computer devices without proper instructions.

we must not access the internet without the supervision of teachers.

we should not uninstall/ change/ delete any programmes without the permission of the teacher.

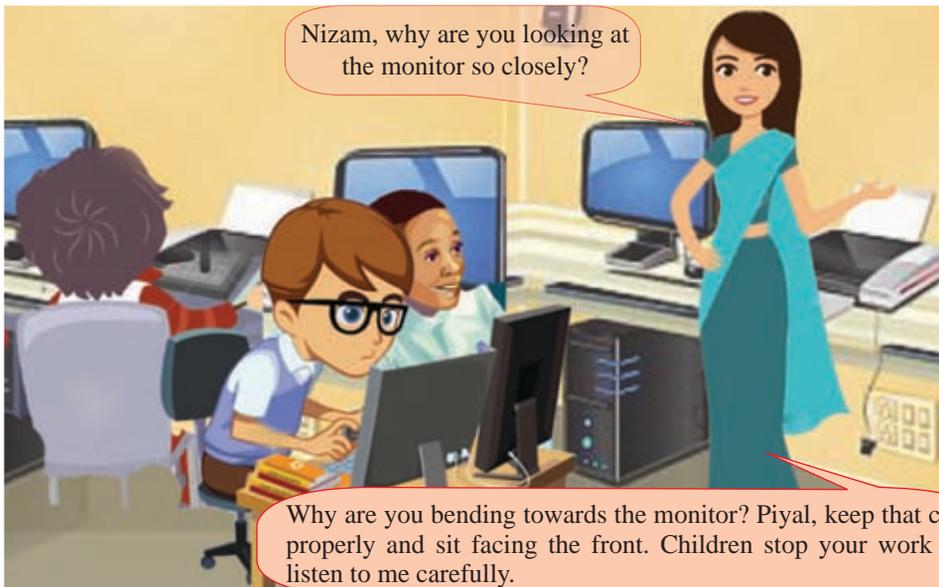
In addition, there can be some other rules and regulations related to your laboratory.

The above regulations are for grade 6 students like you. You will learn more on computer ethics in the forthcoming grades.



**Activity 3 - See 2.3 in the Workbook.**

### 2.2.3 / Let's use Correct Postures when using Computers



It is common for various health problems to occur when using computers constantly. Most of the illnesses occur due to the lack of maintaining a correct posture. So we need to practise maintaining a correct posture from our childhood.

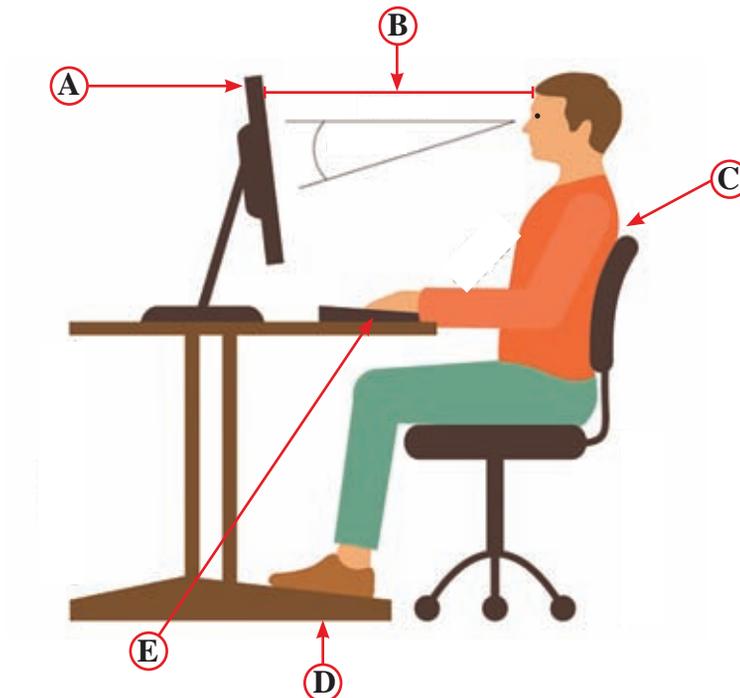


Figure 2.2 - Maintaining a Correct Posture when using a Computer

Correct postures to be followed	When correct postures are not maintained
A. Always keep the computer screen at the level of your eyes or little below.	Pain in the eye, problems in eyesight and tearful eyes can occur.
B. The distance between your eyes and the computer screen should be between 18 and 28 inches.	
C. Sit straight by leaning on to the back of the chair.	Pain in backbone.
D. Keep your legs vertically and place your feet on the ground.	Strain in feet.
E. Keep the keyboard and the mouse at the level of your elbow.	Pain in fingers and elbows.

In addition, adjust the brightness and the contrast of the computer screen to suit your eye. Often give a rest to your eye if you are working on your computer for a long period of time.

Although an incorrect posture can cause health issues, the computer is not a device that can be discarded. Therefore, we must use the computer properly to avoid such problems.



#### Activity 4 - See 2.4 in Workbook.

### 2.2.4 / Let's dispose Electronic Waste Safely

All computer hardware is considered as electronic waste when they become out of use or when the user discards them.

When these harmful substances enter the human body. They can cause various diseases. They can cause various day-to-day inconveniences and gradually lead to develop various long-term non-curable diseases such as cancers and kidney diseases.

When we dispose these tools improperly to the environment it can cause great damage to the environment as well as to human beings, since they have been manufactured from various harmful metals such as Copper, Aluminum and Lead as well as from plastic.



- **Lead**  
Damage the brain, kidneys and disorders in blood circulation
- **Barium**  
Brain swelling, muscle weakness, damage to heart
- **Mercury**  
Damage to kidneys and nervous system
- **Beryllium**  
Lung Cancer

Figure 2.3 - Illnesses that can be caused due to electronic waste



Since, these hazards can cause damages for generations, they must be disposed properly. For that, the 3R system can be used.

**Figure 2.4 - 3R Method**

## 1. Reduce

It is not necessary to upgrade to new equipment periodically if we maintain existing equipment properly as to use them for a long time.

This reduces the amount of waste that is released to the environment.



**Activity 5 - See 2.5 in the Workbook.**

## 2. Reuse

When purchasing new equipment, consider donating or selling the old equipment if they are in working condition, without discarding them.



**Figure 2.5 - Uses of Discarded Computers**

If it is not in working condition, then it can be utilized for other purposes.

For instance, as shown in the picture, an empty monitor can be used as a flower pot and a casing of the system unit can be used as a garbage bin.

The amount of waste that is released to the environment is therefore minimal.

### 3. Recycle

Equipment which are not repairable or reusable, should be recycled without discarding them. It should be handed over to a electronic waste recycling company.



Recycling is a process of transforming the waste to a new product. Waste is separated into small parts and new material is produced through machinery.



**Activity 6 - See 2.6 in the Workbook.**

#### 2.2.5 Let's use Passwords to protect Computers

Computers should be safeguarded physically as well as logically.





You must have read in fairy tales that a door is opened with a secret word. Also, there is a key to open main door of your house. Can you open the door without a key?



To protect the information stored in the computer from outsiders, a secret word can be set in the computer. That is known as a password.

Then you must enter the password before entering the computer. If the password is incorrect, the computer does not allow you to enter.

#### Follow the guidelines given below when setting a password

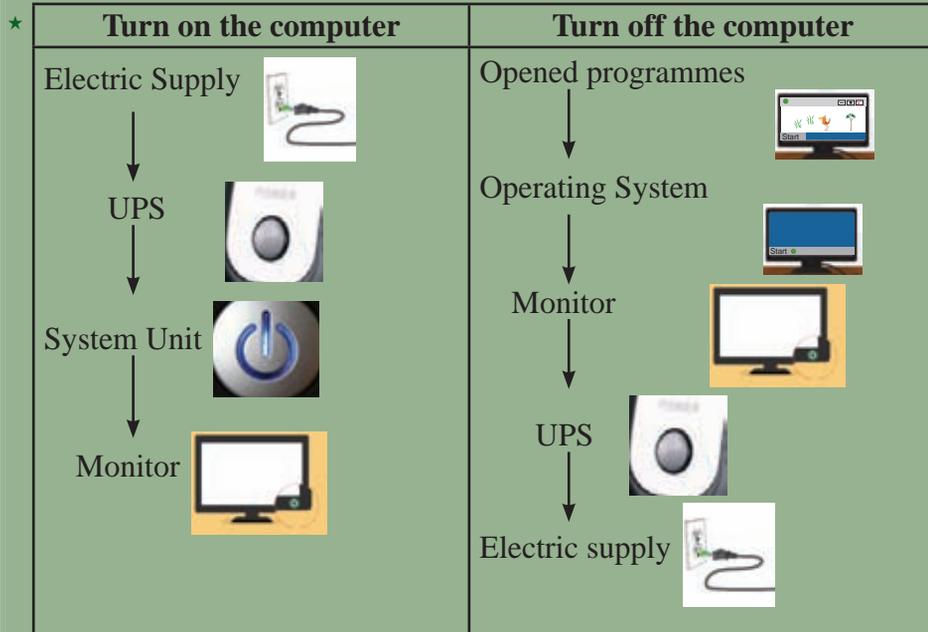
- ☞ The password must be a collection of letters (A-Z), numbers (0 - 9), and symbols (@, #, \$). It should have a minimum of 8 characters including at least one of the above types.
- ☞ The password must not include some simple information like your name, birthday, etc. which can be easily guessed.
- ☞ You can give a password hint.  
In case you forget the password, you can give a word or a statement as a hint that will help you to recall it again.
- ☞ By giving an e-mail address, the password can be restored.



**Activity 7 - See 2.7 in the Workbook.**



## Summary



- ★ It's our responsibility to avoid damaging any equipment in the laboratory.
- ★ Passwords can be used to protect the computers.
- ★ Electronic waste should be disposed properly without harming the environment.
- ★ When using the computer, maintain a correct posture to prevent from physical difficulties that occur on a daily basis and from long term health issues.

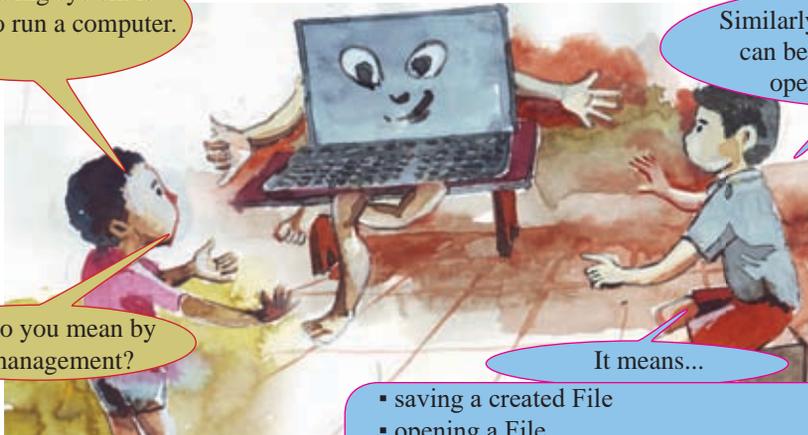


# 3

## Operating System and File Management

An operating system is essential to run a computer.

What do you mean by file management?



Similarly, file management can be done through an operating system.

It means...

- saving a created File
- opening a File
- editing a File
- closing a File
- maximizing, minimizing and resizing a window, etc.

### 3.1 Operating System

You have learnt in the first chapter that an operating system is a software. That means, it is a computer programme. It establishes a relationship between the user and the hardware. It also helps to manage other software in the computer.



User

↔  
Operating System



Computer Software and Hardware

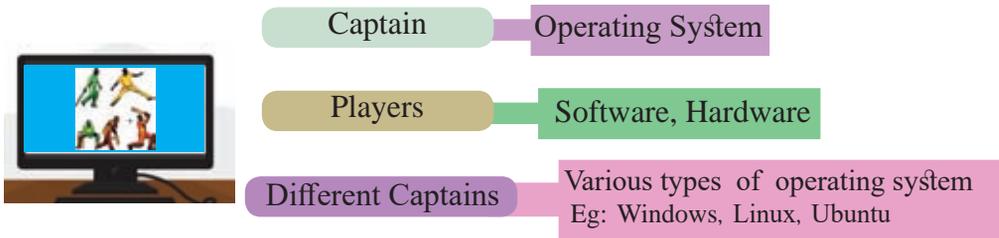
Figure 3.1 - Functions of an Operating System



According to my brother, computer is like a cricket team. Then, the captain is the operating system. Other players are like software and hardware.

The captain leads the players by giving instructions according to the needs of the match. Just like that, software and hardware are managed by the operating system according to the given set of instructions.

Sometimes, captains are changed. Likewise, the operating system also can be changed. Windows, Linux, Ubuntu are some other types of operating systems. It is like changing a captain.



**Figure 3.2 - Explaining of Operating System through an Example**



## Examples for Operating System



Windows O/S



Linux O/S



redhat O/S



Mac OS

Figure 3.3 - Examples for Operating System

## 3.2 User Interface



A user interface is given to a user by the operating system to do his tasks. This interface is displayed on the screen when the computer is turned on.



Activity 1 - See 3.1 in the Workbook.

### 3.2.1 Let's learn about File





## Activity 2 - See 3.2 in the Workbook.

Given below are several files which are stored in a computer.

- List of term test marks in a particular class
- A video of the school play presented at the all island drama competition
- The agenda of the sportsmeet
- The National Anthem
- Images of the sportsmeet

These different types of files are shown with unique symbols. A few examples are given below to give you a basic understanding and you will get a broader knowledge about them in higher grades.

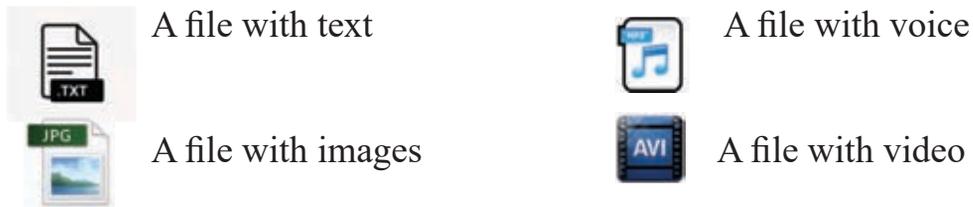


Figure 3.4 - Examples for File Symbols

### User Interface

When you open a file or a programme, it is displayed on the user interface.

You can use the icons which are shown on the user interface to open a file, a folder or a programme.

An icon represents a file, a folder or a programme.



File

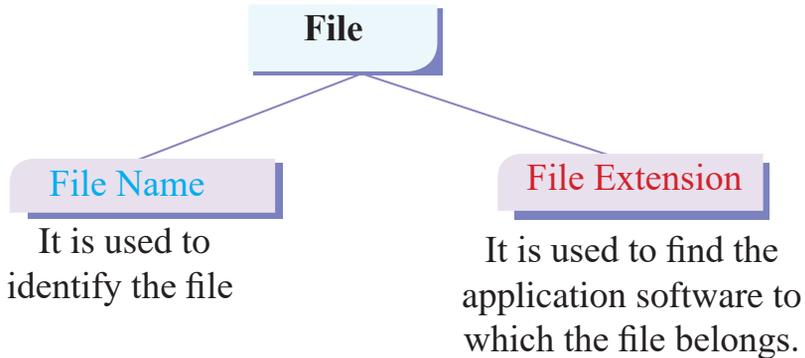


Folder

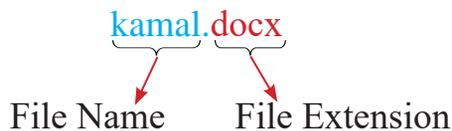


### Activity 3 - See 3.3 in the Workbook.

A file contains two parts.



This file is created by a word processing software and it is named as "Kamal".



Let's see how certain tasks are done using a graphic software to learn more about files. A graphic software is used to draw images, charts, shapes, diagrams, figures and building plans.



**Some Graphic Software**

### 3.2.2 / Let's Identify the Working Window

The working window is displayed once you open a software.

Let's imagine that you drew an art on a working window. (For that, tools in the menu provided in the opened software should be used).

The working window can be maximized , minimized , resized and closed .



Figure 3.5 - Working Window

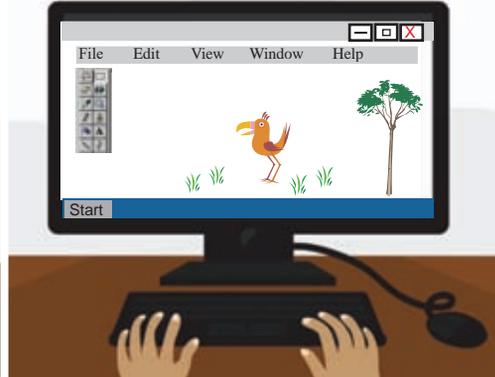


Figure 3.6 - A Working window of an Art

### Minimizing the Working Window

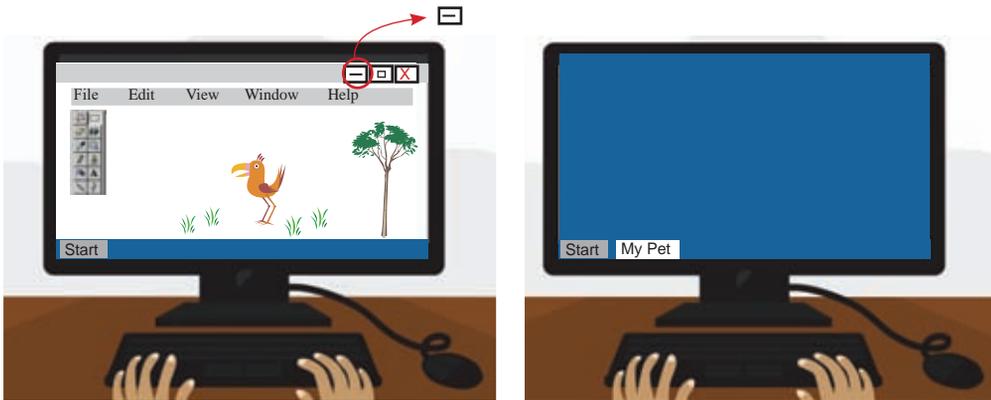


Figure 3.7 - Hiding a Window

Here the window is hidden. The window you opened disappears and is kept on the task bar. It is shown by words or an icon.

Eg:  or 

By clicking on the button shown by the word or the icon, you can restore the working window.

## Maximizing the Window

The working window can be enlarged by clicking on the maximize button so that the screen fits into the entire screen.

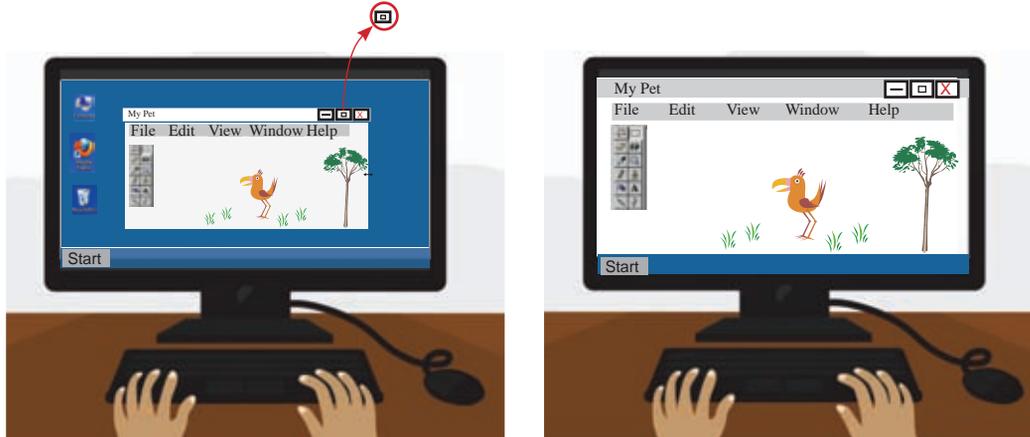


Figure 3.8 - Maximizing a window

It will shrink when you re-click the button again.

## Resizing the Window

There is also the opportunity to change the size of the working window that appears on the screen. When the mouse pointer is brought to the edge of the window, arrow shapes are shown. By dragging these arrow shapes you can change the size of the window.

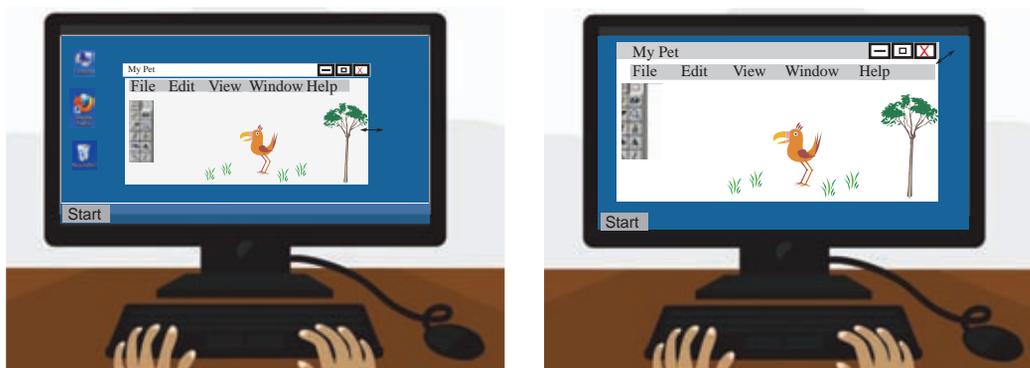


Figure 3.9 - Resizing a Window

## Closing the Window

Click the  button on the top right hand corner to close a window.

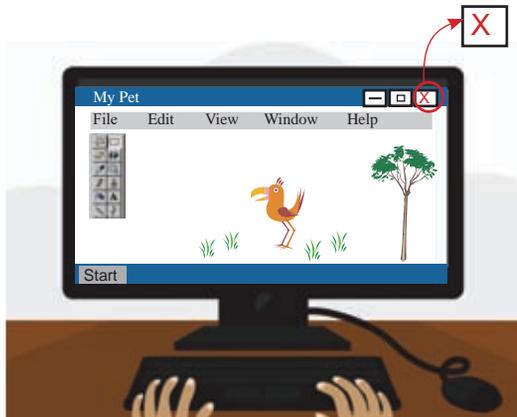


Figure 3.10 - Resizing a Window

When you click the  button, you will see a query window asking whether to save the document or not.

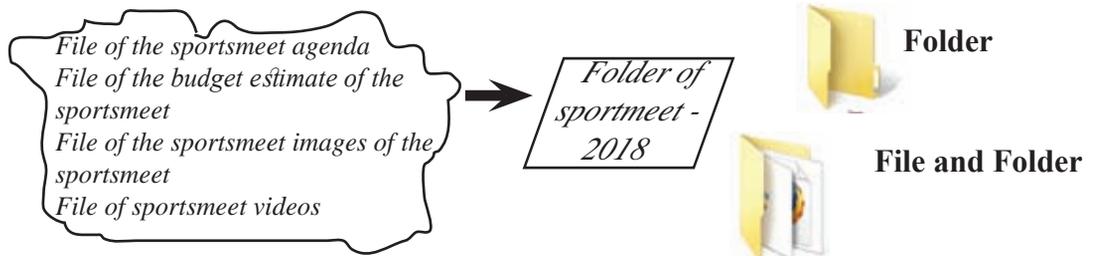
If you want to save the document, to use it later, Select 'Yes' command or if you do not want to save it, click the "No" command.



Figure 3.11 - Saving a Document before closing a Window

### 3.2.3 Let's learn about File Folder

Folders are used to keep files in order.



Following facts about folders and the working window will be useful to you.



Symbols like ; < > ... can be used to name a file or a folder.

## Folder and Working Window



A folder contains files like documents, images, etc.



When you double click on a file or a folder, its content is displayed on a working window.



You can use scroll bars to move the document up and down as well as from left to right.

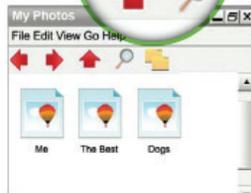
## Menu Bar

### Title Bar

The name of the file, document or the programme will be shown on the title bar.



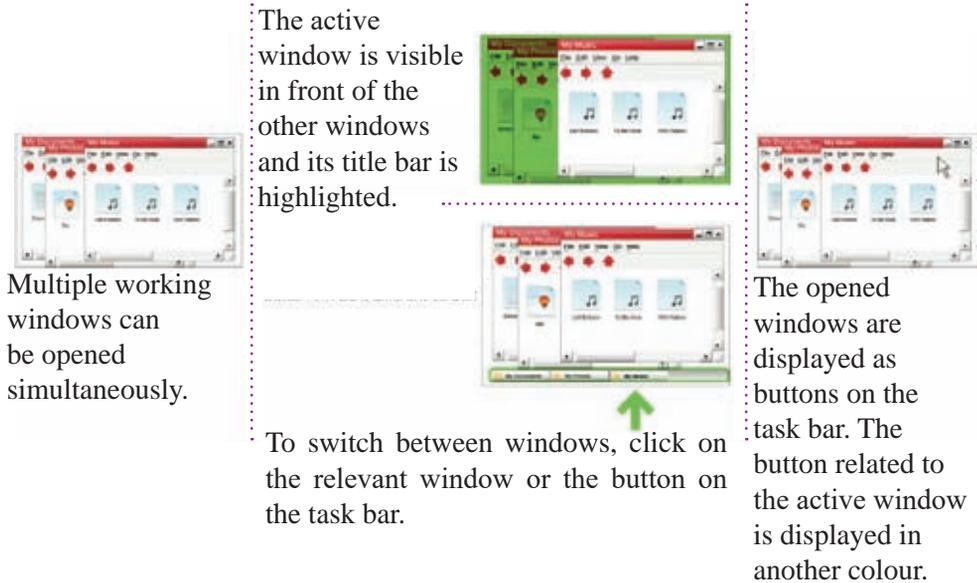
The menu bar contains commands to carry out tasks in a folder, a document or a programme.



### Tool Bar

The tool bar contains several commands that are derived from the menu bar.





## Create a File

Consider the simple art drawn above. When you close the window, if you give a command to save it, it creates a file and saves the document.

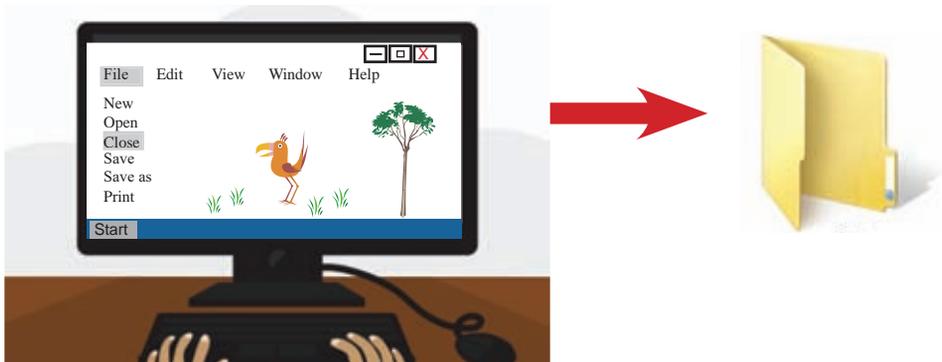


Figure 3.12 - Creating a File



Activity 4 - See 3.4 in the Workbook.

## Saving a File

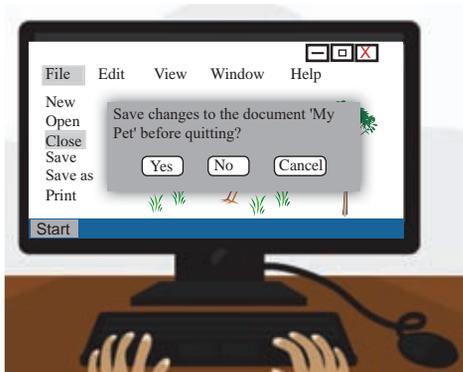


Figure 3.13 - Saving a File

Created files should be saved for reuse. These can be stored in a folder for convenience and order. Here you can use the 'Save' or 'Save as' command to save the file.

When saving the file for the first time, despite the selected command, the "Save as" command window will be opened.

Here, the operating system suggests a name for the file. The user can change it and give a suitable name. Also, determining the location of the file to be stored can be done in the same manner.

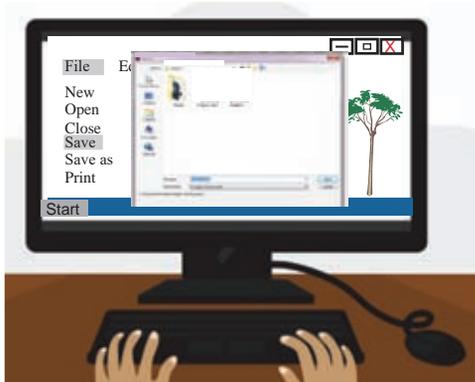


Figure 3.14 - Selecting a Location and giving a Name to save a File

When giving a name to a file, give a name that hints the content of the file. It makes it easier to find the file easily.



It is not allowed to save two files with the same file name which are created by the same software in the same folder. The operation system gives an identity to the file by doing that.

It's also difficult for you to identify several friends who have the same name. Similarly, the same problem affects the operating system. Therefore, it does not allow multiple files to be saved under the same file name in the same folder.

## Open a File



Figure 3.15 - Opening a File

To open a saved file, find the file location and the name. Then, click on it.

## Edit a File

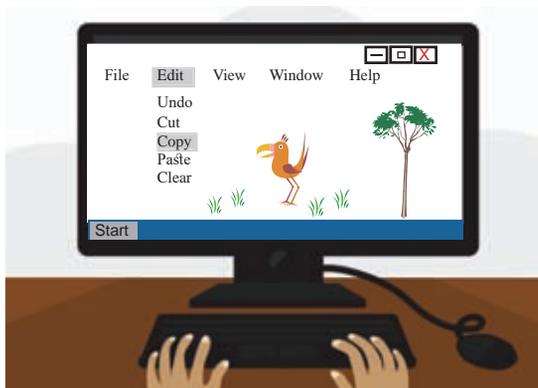


Figure 3.16 - Editing a File

You will be able to edit the saved file after opening it.

Here, it should be saved once you edit it. For that, 'Save' command can be used. If you want to save the file in a different location, then use the 'Save as' command.



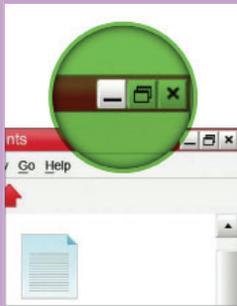
## Activity 5 - See 3.5 in the Workbook.



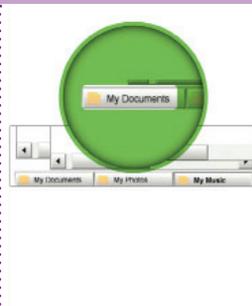
### Summary

- ★ The operating system is a bridge that connects the user and the computer.
- ★ File manipulation is a major function of the operating system.
- ★ Creating a file, editing and closing a file can be done through an operating system. In addition, it is possible to maximize, minimize and resize a window.
- ★ A file is a collection of data and information whereas a folder is a collection of files.
- ★ A file name contains a name and an extension whereas a folder contains only a name.

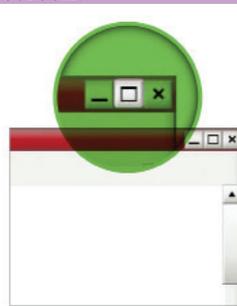
To minimize the screen click the minimize button on the top right hand corner of the screen.



To restore the window, click the relevant button on the task bar.



Click the maximize button to enlarge the screen and to fit the window to the entire screen.



To close the window, click the close button.





# 4

## Using Mouse and Keyboard to use Application Software

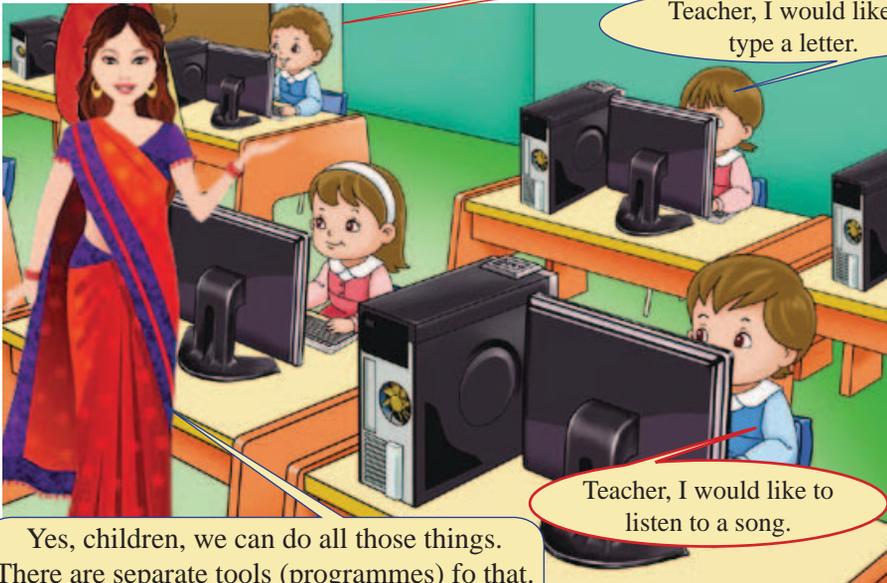
There's a computer. to listen a song, to type a letter, to draw a picture, what else do you need?



### 4.1 Application Software

Teacher, I would like to draw a picture.

Teacher, I would like to type a letter.



Teacher, I would like to listen to a song.

Yes, children, we can do all those things. There are separate tools (programmes) for that. We should know about the keyboard and the mouse to do those things.

## 4.1 Examples for Tasks that can be done by a Computer

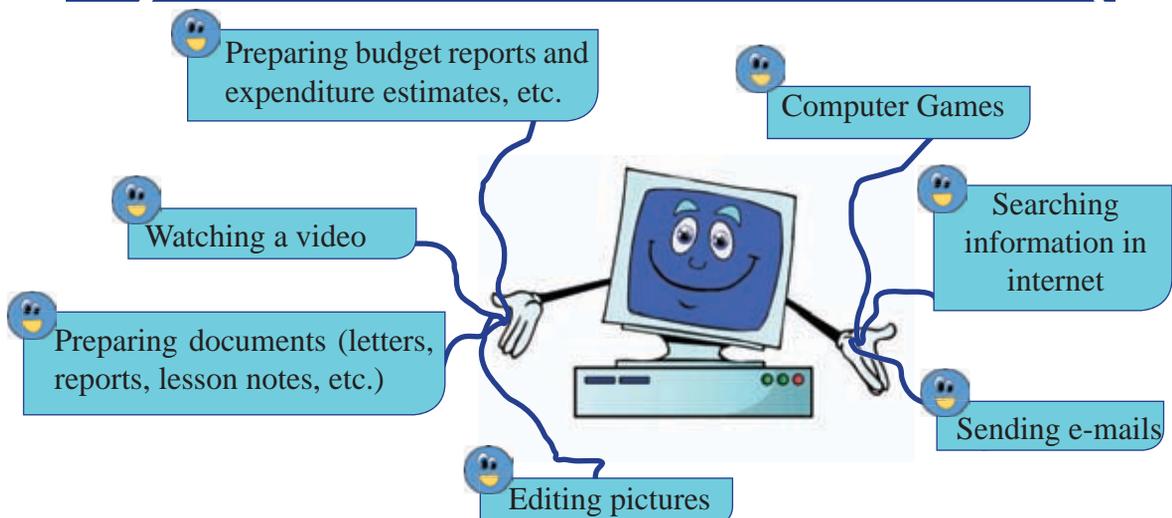


Figure 4.1 - Several Tasks that can be done through a Computer

Various programmes which execute such requirements of the user are called application software.

### 4.1.1 Types of Application Software

Application software is mainly divided into two parts. They are;

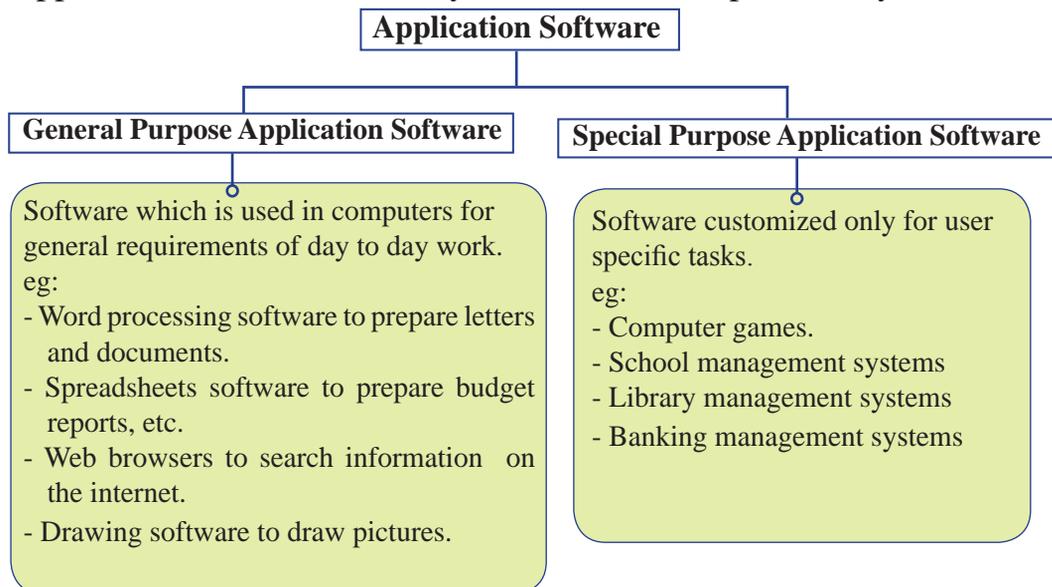
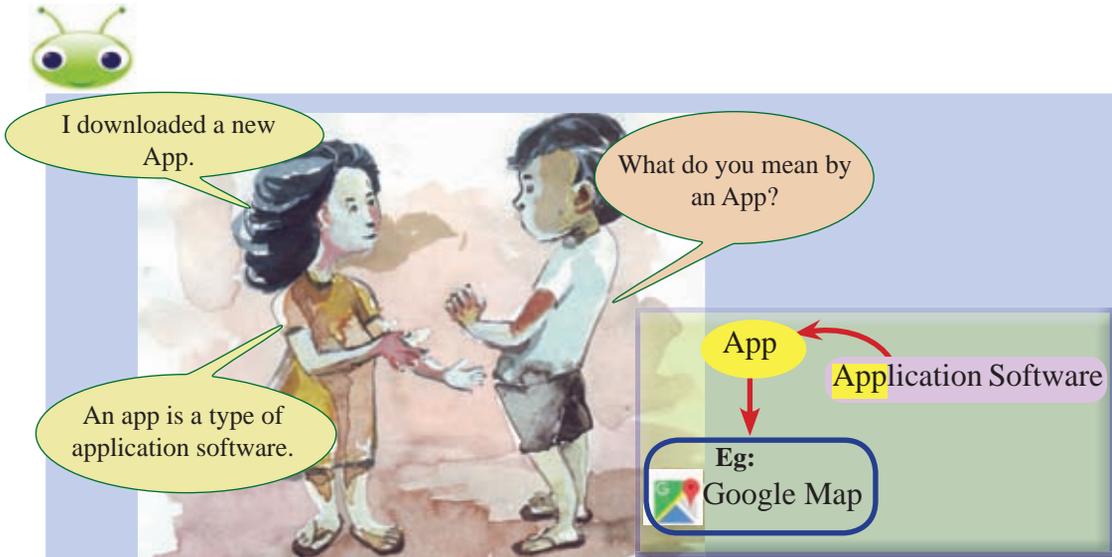


Figure 4.2 - Categorizing Application Software

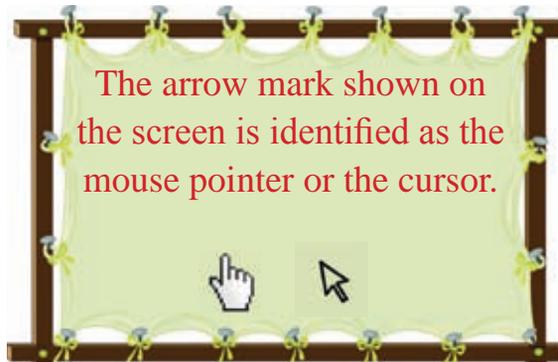


## 4.2 Basic Tools needed to use Application Software

When using application software, basically the keyboard and the mouse are used. Therefore, first of all, you need to get a clear understanding of the mouse and the keyboard to accomplish various tasks using application software. You should properly train yourself to use them.

### 4.2.1 Using the Mouse

Controlling the pointer on the screen can be done by moving the mouse. Also, opening a file, folder, menu and selecting commands can be done by clicking the buttons on the mouse.





## Activity 1 - See 4.1 in the Workbook.

### Main Parts of a Mouse

Normally, the mouse has a left and a right button and a small wheel in the middle.

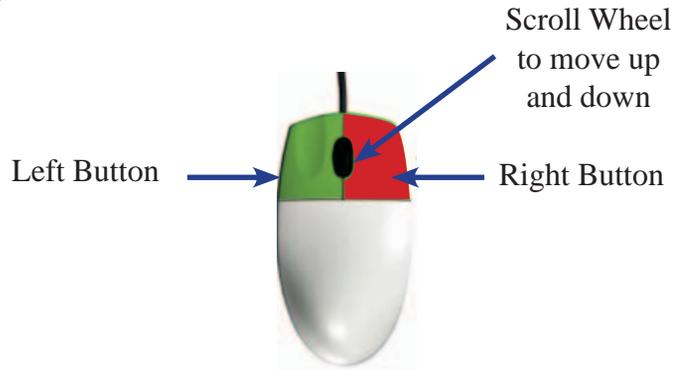


Figure 4.3 - Main Parts of a Mouse



## Activity 2 - See 4.2 in the Workbook.

Let's identify several types of mouse that are in use.



Mouse



Wireless Mouse



Touch Pad

Figure 4.4 - Examples for Mouse Types

## Functions of the Mouse

Many tasks can be performed on the computer screen with a mouse. They can be divided into following three categories.

- Eg:
- Selecting necessary items
  - Opening necessary items
  - Moving necessary items

### Selecting necessary items



To do this, bring the cursor on to the item and click the left button once. Then the item is highlighted.

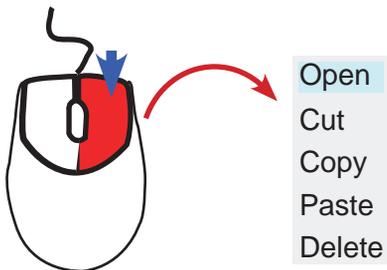
### Opening necessary items

#### Method I



By double-clicking the left button, you can open the application or file that represents a corresponding icon.

#### Method II



Once you click the right button on the icon, select the 'open' command from the sub menu.

## Moving necessary items



Click the left button, then drag and drop it.



In addition, a mouse scroll is used to move the working window up and down. Here, a wheel in the mouse is rotated to move the page up and down.

## Let's use the Mouse Properly



Figure 4.5 - Using the mouse properly

When we use the mouse, we need to learn to hold it properly. Holding the mouse improperly can cause pain and difficulty in our hands.



Figure 4.6 - Using the mouse improperly

## 4.2.2 Keyboard

There are various keyboards such as wired keyboards, wireless keyboards and touch keyboards.



Figure 4.7 - Keyboard



Figure 4.8 - Wireless Keyboard

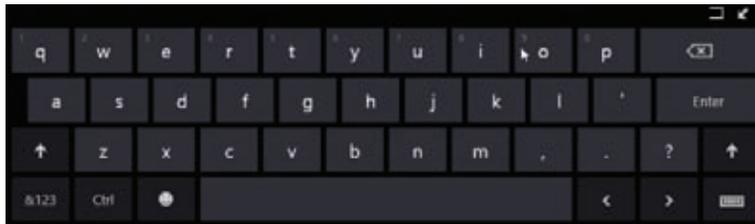


Figure 4.9 - Touch Keyboard

## Types of Keys in the Keyboard and Their Functions

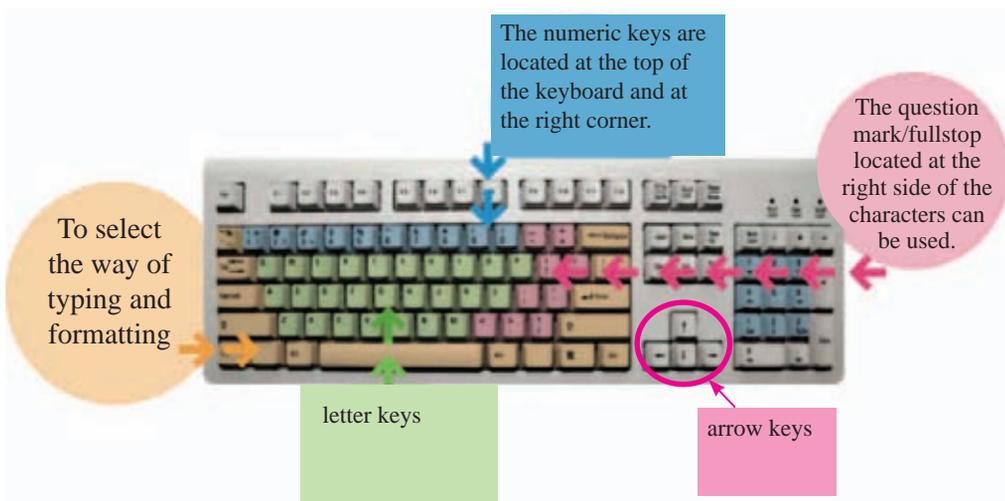


Figure 4.10 - Parts of the Keyboard

There is a vertical line that appears and disappears when you are about to start typing on a document or a box. It is the cursor.



Letter keys are used to type letters. Letter-keys are not located in the order of the English alphabet. The manner in which the letter keys are located on the keyboard is known as 'QWERTY' layout.

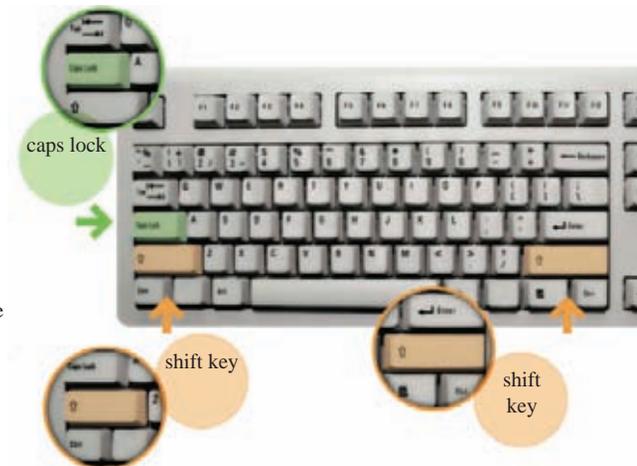


The cursor shows the location where the typing starts.

### Use the Caps Lock key

After pressing the Caps lock key once, you can type in capital letters. When you need to type normally, press the Caps lock key again.

- Pressing Caps Lock key once  
A, C, D
- When you press Caps Lock again  
a, c, d



### Use the Shift key

There are two Shift keys on the right and left hand on a keyboard. When letter keys are pressed while pressing on the shift key, letters are typed in capital letters. Similarly, while pressing the Shift key, if you press other keys, the symbol at the top of the key is typed.

 +  → A

 +  → ?



## Activity 3 - See 4.3 in Workbook.



## Graphic Software

At first, art was drawn manually by man.

Later, software was produced to draw pictures using the computer.



Figure 4.12 - A hand drawn painting



Figure 4.13 - An art drawn using a computer



**Activity 4 - See 4.4 in the Workbook.**

Different software is used to create graphics and to draw arts. This software is known as graphic software.



Figure 4.14 - Examples for Grapic Software



**Activity 5 - See 4.5 in the Workbook.**

## Word Processing Software

The software we use to create and store documents that are needed in everyday life is called word processing software.



Figure 4.15 - Examples for Word Processing Software



## Audio and Video Editing Software



Software has been developed to edit audio and video recordings. Many tasks can be done using this software.

<p style="text-align: center;"><b>Audio</b></p>  <p style="text-align: center;"><b>Hearing</b></p> <p>- Audio Has voice Eg: Radio Programmes</p>	<p style="text-align: center;"><b>Visual</b></p>  <p style="text-align: center;"><b>Sight</b></p> <p>- Video Has voice and images That means, audio-visual Eg: Television programmes</p>
---	--

Among several software which is designed to create and edit audio-video material, software created to edit audio recordings is known as audio editing software and software created to edit video recordings is known as video editing software.

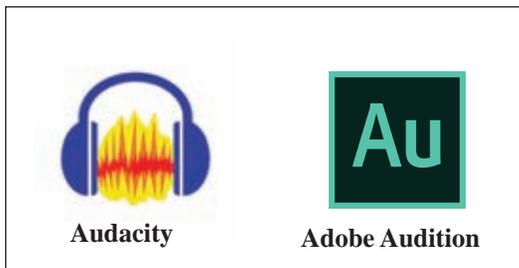


Figure 4.16 - Examples for Audio Editing Software

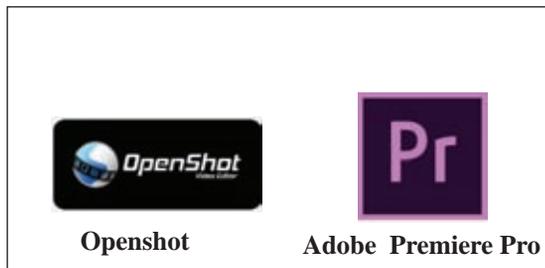
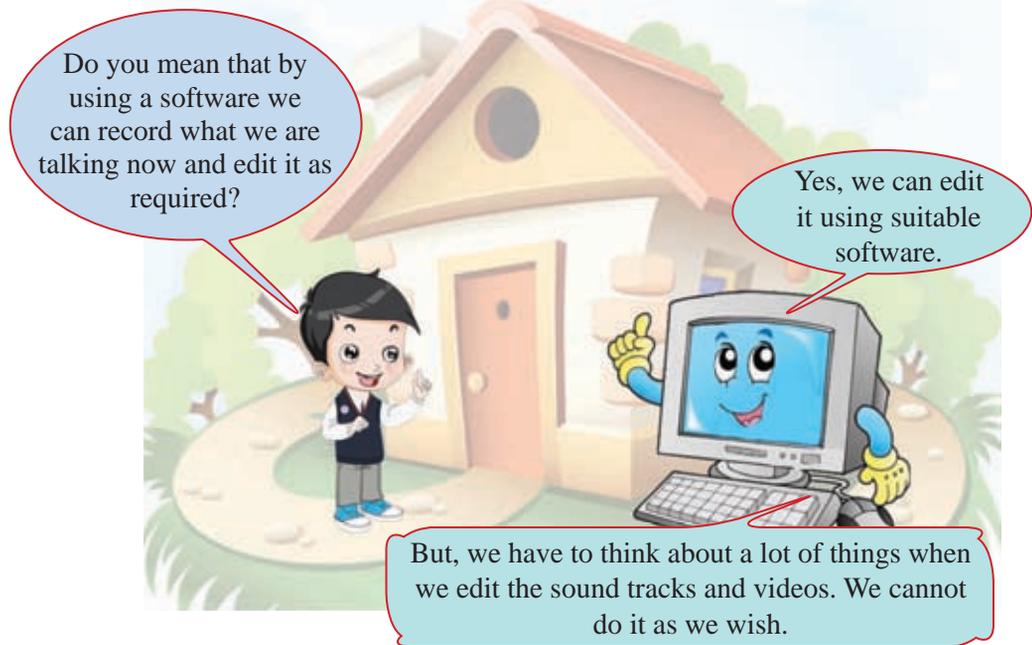


Figure 4.17 - Examples for Video Editing Software



**Activity 7 - See 4.7 in the Workbook.**

## Creating Audio-Video Files



It is very important to comply with the ethics in editing audio and video recordings.

When we record voices and images of others, their permission must be obtained. (In case of small children, the permission of their parents or school must be obtained.)

When editing recordings of voices and images of others, they should not be done in a manner as to make them uncomfortable.

Editing should not be done in a manner as to give a false idea or a message.

You should not use the knowledge of editing software for fraudulent purposes.

If edited audio or video files are made available, it must be done by protecting the identity of you or relevant people.

The complex block contains five text boxes, each with a small orange fruit icon in the top left corner. The text boxes are arranged in a grid-like fashion. To the right of the text boxes is an illustration of a colorful parrot (red, blue, and yellow) perched on a green branch with leaves.

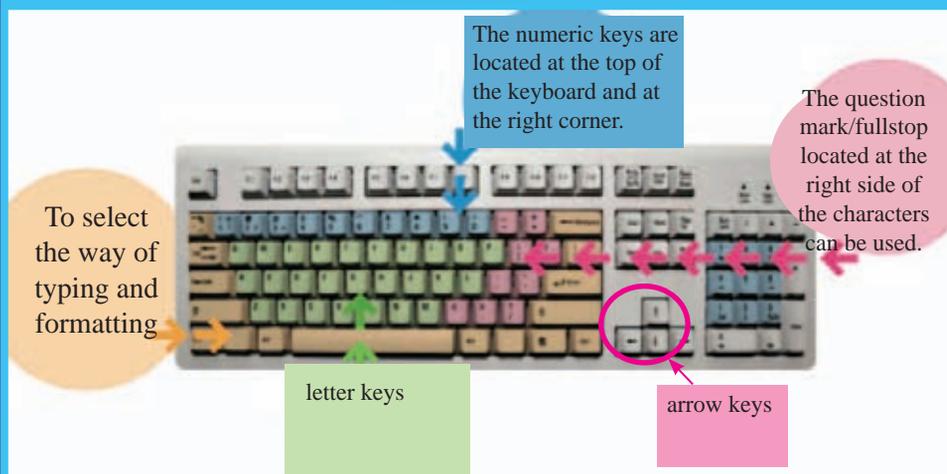
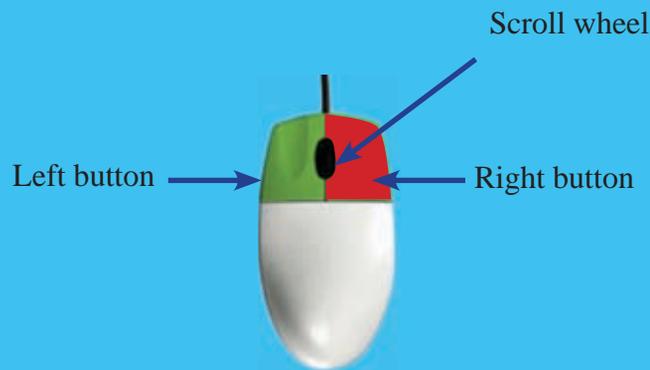


**Activity 8 - See 4.8 in the Workbook.**



## Summary

- ★ Software which is designed to fulfil user requirements is called application software.  
Eg: graphics software, word processing software, audio-video software
- ★ Knowledge of the keyboard and the mouse is important to use application software.
- ★ Right button, left button and scroll wheel are the main parts of a mouse.





# 5

## Algorithm and Flow Charts

### 5.1 Process of Solving Practical Problems

Imagine that a group of relatives have arrived when you were alone in the house. You need to serve them some tea. Here, you should prepare a cup of tea by following different steps.

On another occasion, you will have to make a fruit salad for a dessert or make a birthday cake. On all these occasions, you need to solve problems. Compare it with calculating the area of a rectangle during your mathematics lesson.

When we have a certain aim, we do certain activities to achieve it. In our day to day life, we often solve problems.

#### 5.1.1 Problem Solving

The problem needs to be analyzed well before solving it. Then you can get a good understanding of how to solve the problem. The process of problem solving has an input, an outcome and a process.

Input	- Things to be included to solve the problem.
Process	- Guidelines to be followed to solve the problem.
Output	- The result you get after solving the problem.

Thus, you will understand that processing content according to a recipe is known as solving problems.

### Example: 1

The input, process and output of preparing a fruit salad is as follows.

Input - a variety of fruits

Process - washing fruits, cutting fruit, mixing

Output - Fruit salad

### Example: 2

The input, process and output of finding the area of a rectangle are as follows.

Input - the length and the width of the rectangle

Process - length x width

Output - area of the rectangle



Activity 01 - See 5.1 in the Workbook.

## 5.2 Algorithm

If you are able to prepare a cup of tea, tie the shoe lace correctly, or put on the school uniform correctly, then you know how to use an algorithm.



Figure 5.1 - Some instances in daily life where we use algorithms

## 5.2.1 What is an algorithm?

### Algorithm

A method that includes all the steps of solving a problem in order is known as an algorithm.

#### Example 1

Steps to create a fruits salad are as follows.

##### Step 01



Finding various kinds of fruits

##### Step 02



Washing all the fruits well

##### Step 03



Cutting fruits into small pieces

##### Step 04



Putting the pieces of fruit into a bowl

##### Step 05



Add sugar and mix

##### Step 06



Serve the fruit salad in bowls

It's important to write the steps sequentially in an algorithm. Think about what will happen if the sixth step is done as the second step. All the fruits mixed with sugar should be washed again.

Therefore, it is important to write the steps of an algorithm sequentially.

## 5.2.2 Writing Algorithm

When writing an algorithm in a standard way, every algorithm must have a start and an end. Therefore, it is compulsory to include an initial step and a final step in writing an algorithm in addition to the normal steps.

### Example 1

The algorithm for making a chocolate cake

<b>Step 01</b>	Start
<b>Step 02</b>	Clean and wash the baking tray and other bowls
<b>Step 03</b>	Dissolve chocolate
<b>Step 04</b>	Mix wheat flour and baking powder
<b>Step 05</b>	Beat butter until it gets creamy. While beating, add sugar little by little
<b>Step 06</b>	Add the eggs one by one to the sugar and butter mixture and beat it. Then add the flour mixture little by little.
<b>Step 07</b>	Add the dissolved chocolate
<b>Step 08</b>	Add milk
<b>Step 09</b>	Put the mixture into the baking tray and bake it
<b>Step 10</b>	Let it cool after baking
<b>Step 11</b>	Decorate as you wish and serve it
<b>Step 12</b>	End

## Example 2

Algorithm to find the area of a rectangle.

<b>Steps 01</b>	Start
<b>Steps 02</b>	Get the length of the rectangle
<b>Steps 03</b>	Get the width of the rectangle
<b>Steps 04</b>	Area = length x width
<b>Steps 05</b>	Get the area of the rectangle
<b>Steps 06</b>	End



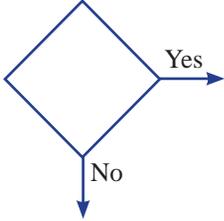
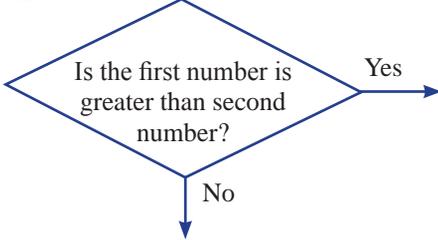
**Activity 02 - See 5.2 in the Workbook.**

## 5.3 Flow Chart

A flow chart is a graphical representation of the algorithmic steps.

Here, standard symbols are used to show each action.

Symbol	Usage
	Used to indicate the start and the end. Eg: 
	Used to indicate the input and the output. Eg:  

	<p>Used to show an action/a process</p> <p>Eg: Adding eggs one by one to the mixture of sugar and butter and beating it.</p> <p>Area = length x width</p>
	<p>Used to indicate an instance of decision making.</p> 
	<p>It is used to indicate the direction of data flow.</p>

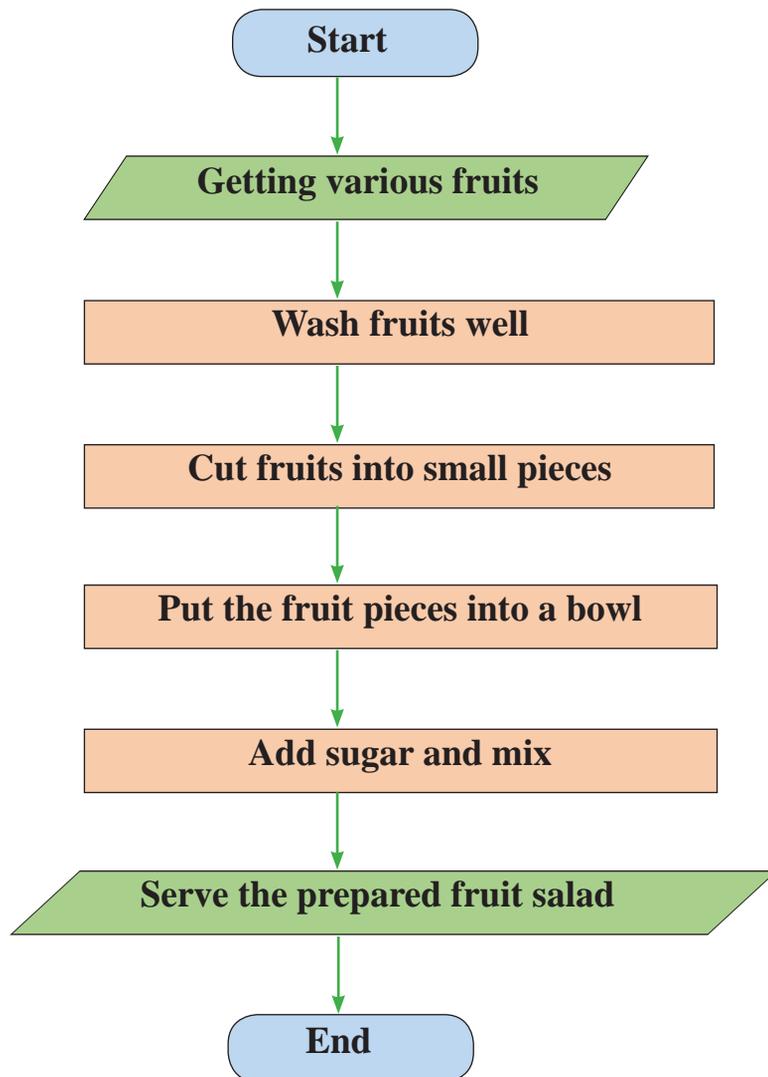


**Activity 03 - See 5.3 in the Workbook.**

## Example 01

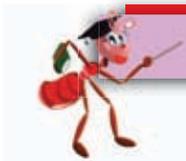
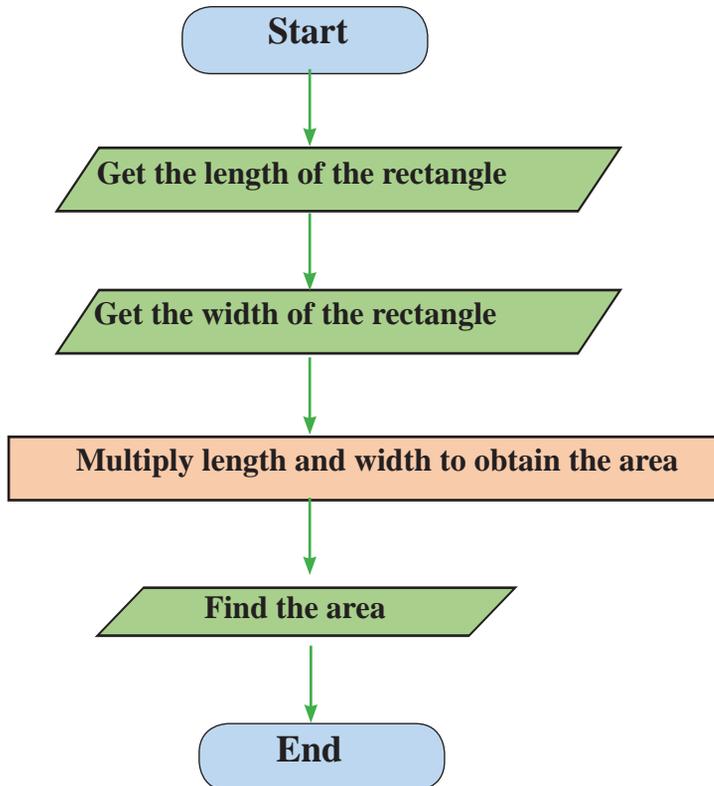
Drawing the flow chart for making a fruit salad using the above symbols is given below.

Here the symbols related to start, end input out and process are used.



## Example 02

The flow chart for finding the area of a rectangle is given below.



**Activity 04 - See 5.4 in the Workbook.**



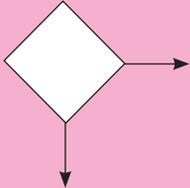
## Summary

- ★ Before the problem is resolved, it needs to be analyzed well.
- ★ There is an input, output and a process when solving a problem.
- ★ Things we feed to solve the problem are identified as the 'input', the steps to be followed when solving a problem are identified as the 'process', and the result we get after solving the problem is named as the 'output'.
- ★ A method set out in order including all the steps needed to solve any problem is identified as an algorithm.
- ★ A standard algorithm must have a start and an end.
- ★ A flow chart is a graphical representation of the algorithmic steps. Specific symbols are used to indicate each action.

★  shape is used to indicate the start and the end.

★  shape is used to indicate the input and the output.

★  shape is used to indicate the process.

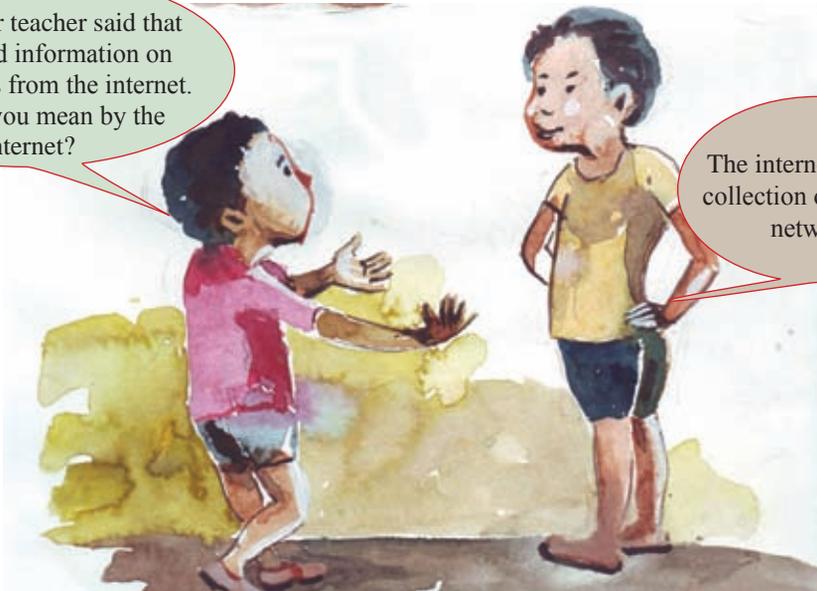
★  shape is used to indicate the decision taken.



## 6 Using the Internet for collecting Information and Communication

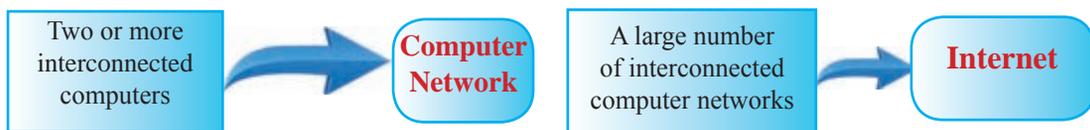
### 6.1 Let's learn about the Internet

Brother, our teacher said that we can find information on sea creatures from the internet. What do you mean by the internet?



The internet is a large collection of computer networks.

The internet is made up of a large number of computers and computer networks around the world.



There are a wide range of services available on the internet reading such as reading newspapers, bill payments, online shopping, exchange of letters and watching television.

## 6.2 Accessing Internet



<http://www.e-thaksalawa.moe.gov.lk>



Figure 6.1 - Model of a Web Page

## 6.2.1 Web Browser

You open a website or a web page in a web browser. The software used to open websites and webpages on the internet is the web browser.

Eg:



Google Chrome



Internet Explorer



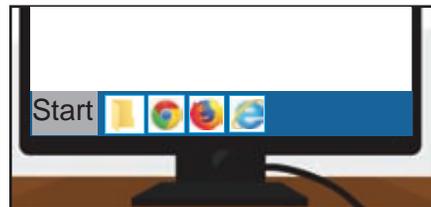
Mozilla Firefox

## 6.2.2 Use of Web Browsers

To use a web browser, the computer should be connected to the internet.



Normally a web browser can be opened via a shortcut on the desktop.



The address bar can be seen on the top of the web browser's interface.

Address bar



If you want to open a website, you need to enter an address in the address bar.

Bring the cursor on to the address bar and click on it. Then enter the address directly. Then press the enter key.

**Eg:** Accessing the website of the Ministry of Education



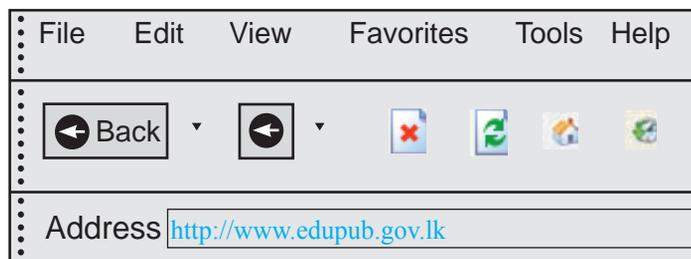
**Figure 6.2 - Website of the Ministry of Education**

If you have typed the address previously, it will be displayed. Hence, bring the cursor and click on it.



**Figure 6.3 - Address Bar**

There is a toolbar in the web browser. These toolbars can be used to change websites and update web pages.



**Figure 6.4 - Web Address of the Educational Publications Department**

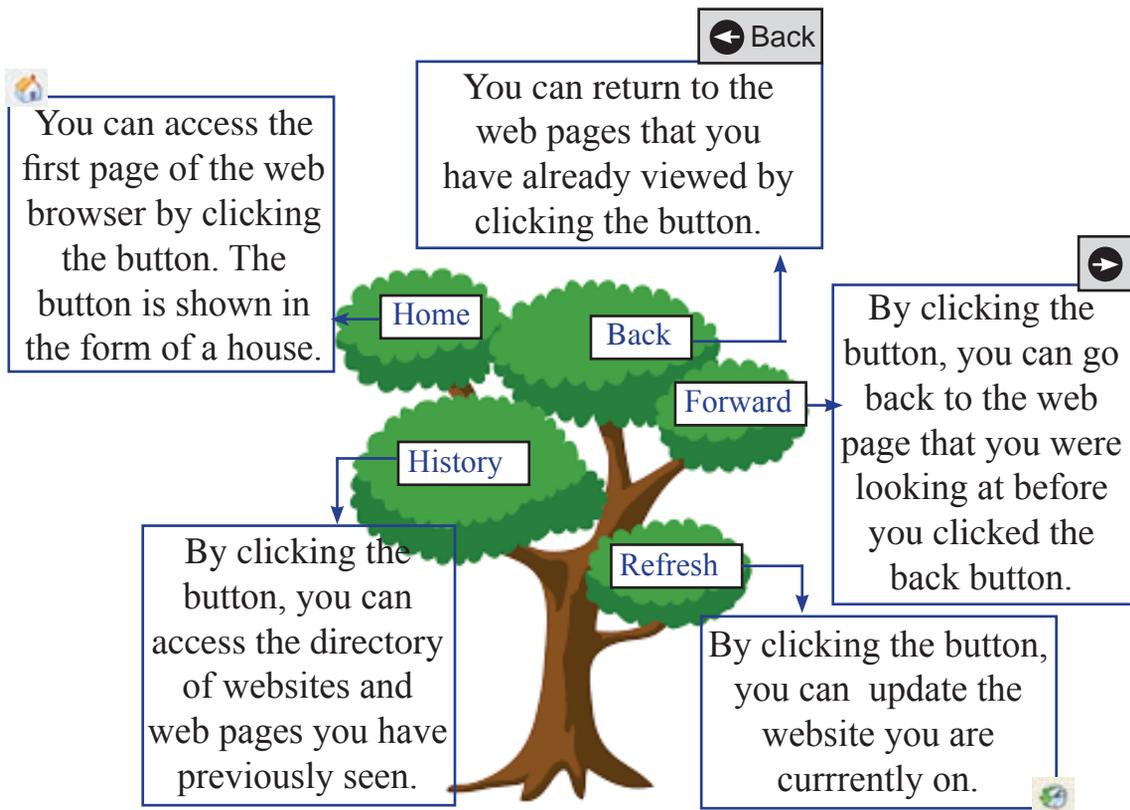
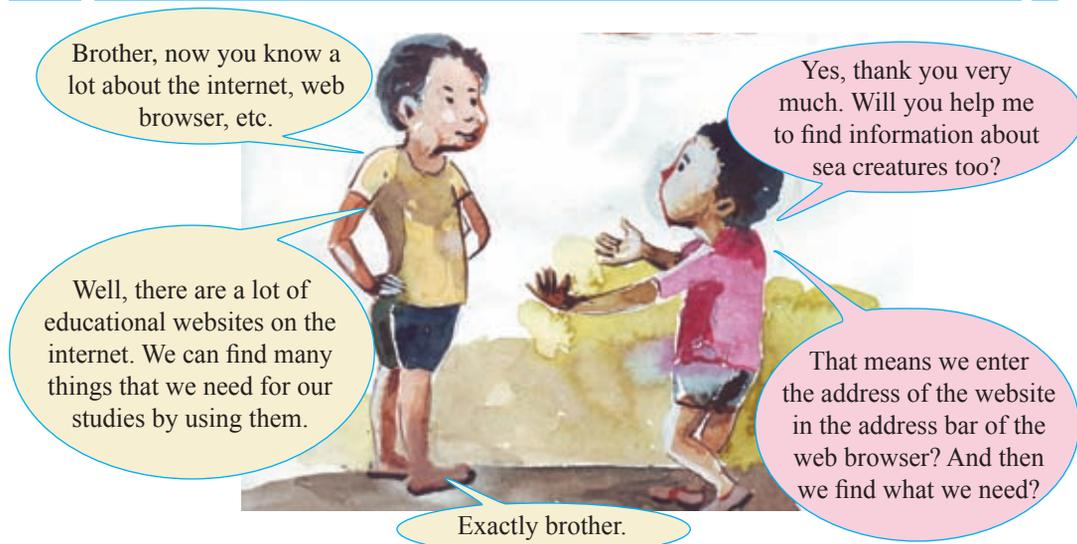


Figure 6.5 - Some Buttons in a Web Browser

### 6.3 Obtaining Information from Educational Websites



There are a lot of educational websites on the internet and we can get many information regarding our studies. In order to enter a website the address of the web site should be entered in the address bar of the web browser.

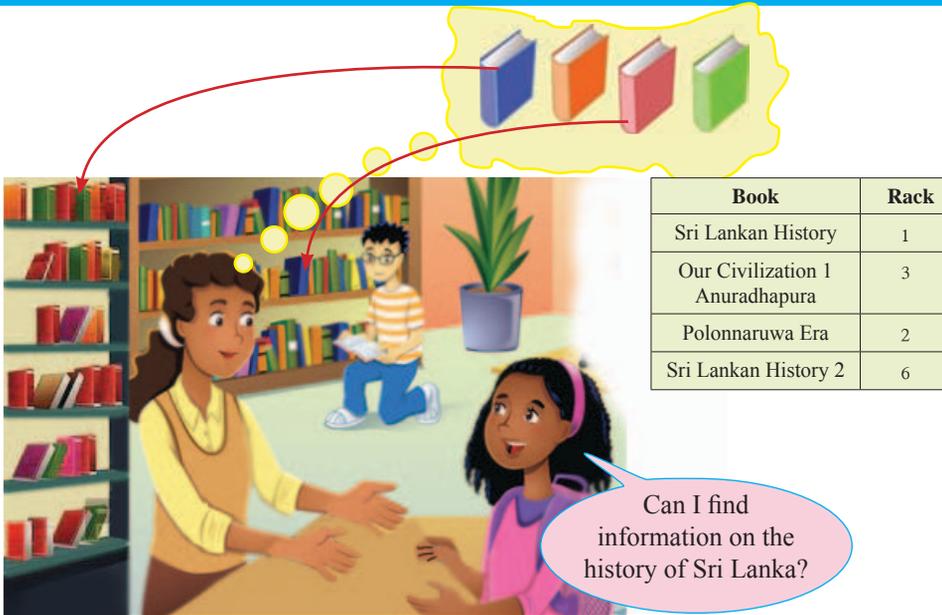
Example : [www.bbc.com/bitesize](http://www.bbc.com/bitesize)

## 6.4 / Let's learn about Search Engines

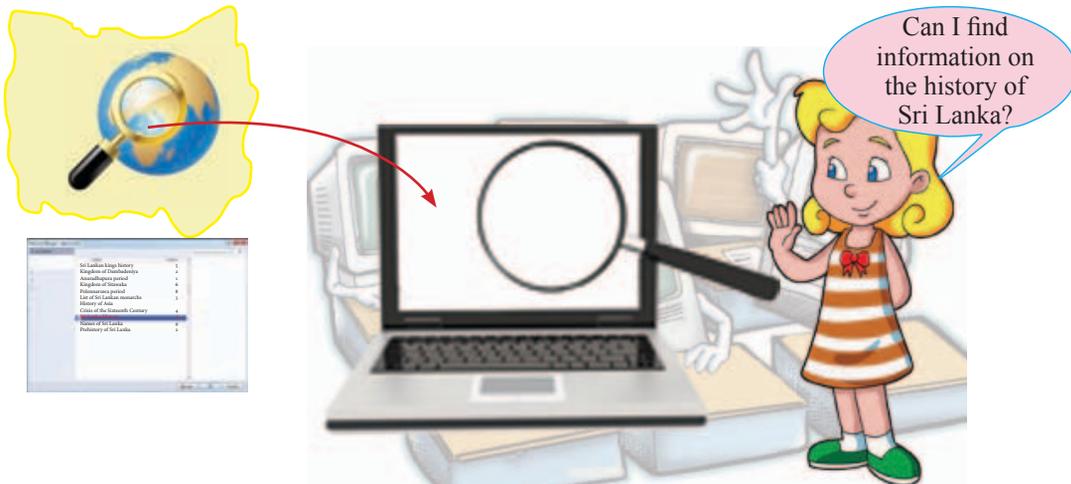


A search engines is a software that can be used to find information on the internet. This gives you a list of websites related to the facts that we are searching for.

## Use of Search Engines



To assist Yalini to find information, the librarian should know the books about the history of Sri Lanka and know the location of books.  
In the end, a list of names of the books and the place where the books are placed will be provided.



To help Anne to find the information, the search engine should know about websites or web pages that contain information on the history of Sri Lanka and they should also know the location of websites or webpages.  
In the end, a list of names and addresses of websites will be available to help you find relevant websites or web addresses.

There are a large number of websites and web pages on the internet. Search engines can search anything such as recipes, news, history, science, education, etc. on those sites.

Search engines are needed to find what is most productive on the internet.

A search engine efficiently scans thousands of websites and web pages and process them.

- Examples for search engines;
  - Google - [www.google.com](http://www.google.com)
  - Yahoo - [www.yahoo.com](http://www.yahoo.com)
  - Bing - [www.bing.com](http://www.bing.com)



Figure 6.6 - Search Engines

## Opening and Using Search Engines

To use search engines, you need to open the web browser that is installed in a computer.

😊 The address of the search engine must be entered in the address bar.

😊 You can enter the search engine by clicking the  key on the address bar or by pressing  key on the keyboard.

😊 There is a search box or a search field in a search engine.

😊 Enter the key words relevant to the information and click the search button.

Your search results are shown as a list of websites and links. It will show a list of the most popular or the most suitable websites or links on the top. From that, you need to select the relevant site and click on the link to view it.

The keywords are the simplest and straightforward terms of what you are looking for.

For example,

Think that you need to search about the history of Sri Lanka. You can use

**'History Sri Lanka'** as a key word.

## Tips for making Search Results more effective

The following short tips can be used to make your search more effective:

- Use keywords. Do not use complete sentences/questions.  
Eg: 'I need the history of Sri Lanka'.

You should type 'Sri Lankan History' or 'History Sri Lanka' instead of 'I need the History of Sri Lanka'.

- If you cannot find what you require, try using a different word or a different expression.

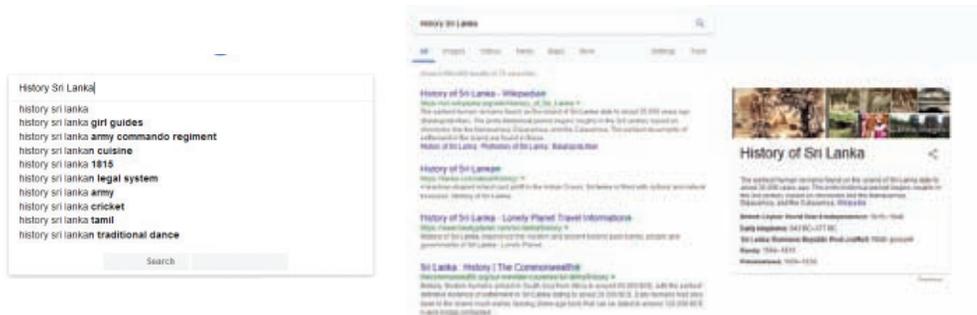


Figure 6.7 - Search Information using a Search Engine



## Activity 1 - See 6.1 in Workbook

In some searches, it will show hundreds of web pages irrelevant to your search. Be careful when selecting your search terms to avoid that. Your search engine will give an accurate result when your word is more appropriate.

1. Use inverted commas (" ") for a clause with several words.



2. Removing unnecessary words

Do not use words that are not relevant to your search. Do not use words like "how, and, in, to, as". Use the names of people, places or things you want to find.



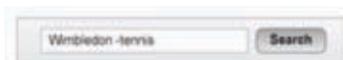
3. When you want to use more than one main word. Connect the words with '+'. For example, when you need to see the beautiful places in Kandy,

It is better to use



- 4) To remove unnecessary facts

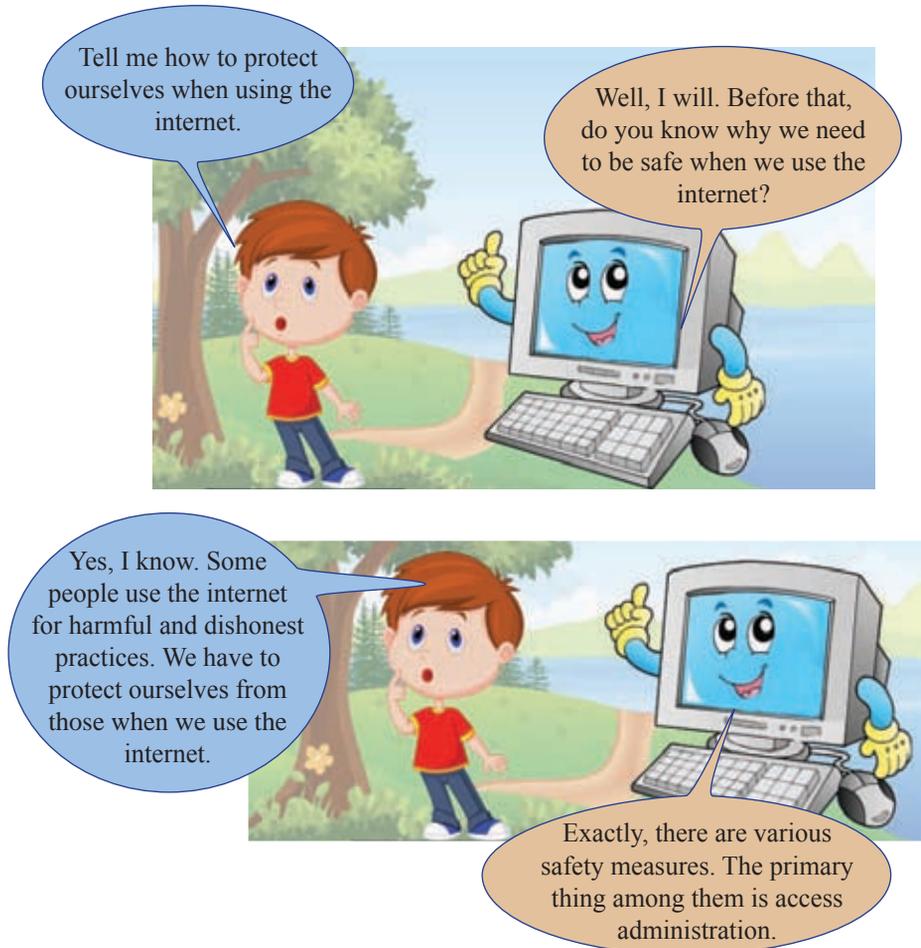
Use '-' in front of the unwanted word. For example, when you are searching for information about Wimbledon, it would show information on tennis too. So to remove details about tennis, use;



5. When looking for an image about something, select the 'image' command of the search engine to search what you need.



## 6.5 / Let's use the Internet Safely



The access administration is following different measures to access the internet safely and with a control. When we are using the internet, we interconnect with various computer networks and various websites around the world. Thus, it can influence our computer in many ways.



## 6.5.2 Use E-mail Safely

Individuals can send e-mail messages in order to access personal information, such as bank account details. We can also receive e-mails containing advertisements that are sent to thousands of people for commercial purposes.

Here are some steps you can follow to safeguard e-mails.

- Be careful when opening e-mails sent by unknown people.
- Avoid replying those e-mails and prevent from accessing links in them.
- Avoid providing information to any institution who request them through e-mails without inquiring about them.

## 6.5.3 Doing Safe Online Transactions

One of the important uses of the internet is that we can do online transactions and purchase goods.

But, you should be very careful. In order to purchase goods, you must use most reliable websites and you must do payments through safe methods.



It's important to follow the directions and instructions of those who have good knowledge about using the internet. At present, there is an increase in the fraudulent acts on the internet.

Be sure to get the help and guidance of your teachers, parents, or adults whenever you access the internet. It will make your browsing time more productive, satisfying and safe.



**Activity 2 - See 6.2 in the Workbook.**



### Summary

- ★ The internet is a collection of a large number of computer networks.
- ★ There are a number of internet services that can be used to exchange information and web is one of the services.
- ★ Documents, pictures, videos and sounds can be exchanged through web and they are stored as webpages.  
A website is created using web pages. A web address is used to identify a website.

- ★ The software used to look up web pages is the web browser.
- ★ Search engines are used to find information.
- ★ The service used to send messages via the internet is e-mail.
- ★ You can use the internet to make transactions and use secure web addresses only.
- ★ Differences between a web browser and a search engine:

<b>Web Browser</b>	<b>Search Engine</b>
It is a software used to access websites through the internet and view the web pages.	It is a programme used to find information needed from a vast collection of information on the internet. This requires a web browser.
The web address is used to access the website.	The words or phrases are used to find information.
Related website is opened.	Provides a list of relevant websites. You must select the suitable website to find the relevant information.

## English-Sinhala-Tamil Glossary

No	English	Sinhala	Tamil
1.	abstract model	විදුක්ත ආකෘතිය	கருத்தியல் மாதிரி
2.	acceptance testing	ප්‍රතිග්‍රහණ පරීක්ෂාව	ஏற்புச் சோதனை
3.	access privilege	ප්‍රවේශවීමේ වරප්‍රසාදය	அணுகல் உரிமை
4.	agile model	සුවලය ආකෘතිය	சறுசறுப்பு மாதிரி
5.	alternate key	විකල්ප යතුර	மாற்றுச் சாவி
6.	American Standard Code for Information Interchange (ASCII)	තොරතුරු හුවමාරුව සඳහා වූ ඇමරිකානු සම්මත කේතය	தகவல் இடைமாற்றுக்கான அமெரிக்க நியம விதிக்கோவை
7.	amplitude	විස්තාරය	வீச்சம்
8.	amplitude modulation	විස්තාර මූර්ජනාව	வீச்சப் பண்பேற்றம்
9.	analog	ප්‍රතිසම	ஒப்புமை
10.	anchor	රැඳවුම	நிலை நிறுத்தி
11.	application layer	අනුප්‍රයෝග ස්ථරය	பிரயோக அடுக்கு
12.	architecture	නිර්මිතය	கட்டமைப்பு
13.	arithmetic and logical unit (ALU)	අංක ගණිත හා තාර්කික ඒකකය	எண்கணித மற்றும் தர்க்க அலகு
14.	array	අරාව	அணி
15.	artificial intelligence	කෘතිම බුද්ධිය	செயற்கை நுண்ணறிவு
16.	Affective computing	බුද්ධිමත් සහ චිත්තවේගී පරිගණකය	நுண்ணறிவு உணர்திறன்மிக்க கணித்தல்
17.	associative law	සංකටන න්‍යාය	கூட்டு விதி
18.	attenuation	වැහැරීම්/තාපනය	நொய்மை
19.	attribute	උපලක්ෂ්‍ය / ලක්ෂණ / උපලක්ෂණය	பண்புகள்
20.	authoring tool	සම්පාදන මෙවලම	படைப்பாக்கக் கருவி
21.	Automated Teller Machine (ATM)	ස්වයංකාර මුදල් ගනුදෙනු යන්ත්‍රය	தானியங்கிப் பணம் கையாள் இயந்திரம்



45.	central processing unit (CPU)	மீடும் கருவியைப் போன்றது	மத்திய செயற்பாட்டு அலகு
46.	characteristics	வகை குணம் / சிறப்பணம்	சிறப்பியல்புகள்
47.	check box	கட்டுமானம் செய்யப்படுகிறது	சரிபார்ப்புப் பெட்டி
48.	client-server model	கேள்வி கேள்வி-கேள்வி மாதிரி மாதிரி	சேவைப் பயனர் மாதிரி
49.	clock	காலகணிப்பு	கடிகாரம்
50.	cloud computing	கிளவு கணினி	மேகக் கணிமை
51.	coaxial cable	காம்பிளாக் கேபிள்	ஒரேசு வடம்
52.	code editor	கொடை கட்டும்	குறிமுறை தொகுப்பி
53.	comment	பேச்சு	விளக்கக் குறிப்பு
54.	commutative law	கொடுக்கக் கொடுக்க	பரிமாற்று விதி
55.	compact disc	கம்பாக்ட் டிஸ்க்	ஒளியியல் வட்டு
56.	compatibility	கொடுக்க	பொருந்துகை
57.	compiler	கொடுக்க	தொகுப்பான்
58.	component	கொடுக்க	கூறு
59.	composite key	கொடுக்க	கூட்டுச் சாவி
60.	constant	கொடுக்க	மாறிலி
61.	content management system (CMS)	கொடுக்க கட்டுமானம்	உள்ளடக்க முகாமைத்துவ முறைமை
62.	context switching	கொடுக்க	சந்தர்ப்ப நிலைமாற்றல்
63.	contiguous allocation	கொடுக்க	அடுத்தடுத்தான ஒதுக்கீடு
64.	control structure	கொடுக்க	கட்டுப்பாட்டுக் கட்டமைப்பு
65.	control unit (CU)	கொடுக்க	கட்டுப்பாட்டலகு
66.	credit card	கொடுக்க	கடன்ட்டை
67.	customization	கொடுக்க	தனிப்பயனாக்கல்
68.	data	கொடுக்க	தரவு
69.	data and control bus	கொடுக்க	தரவும் கட்டுப்பாட்டுப் பாட்டையும்

70.	database management system (DBMS)	දත්ත සමුදාය කළමනාකරණ පද්ධති	தரவுத்தள முகாமைத்துவ முறைமை
71.	data definition language (DDL)	දත්ත නිර්වචන භාෂාව	தரவு வரையறை மொழி
72.	data dictionary	දත්ත ශබ්දකෝෂය	தரவு அகராதி
73.	data flow diagram	දත්ත ගැලීම් සටහන	தரவு பாய்ச்சல் வரையடம்
74.	data flow model (DFM)	දත්ත ගැලීම් ආකෘතිය	தரவு பாய்ச்சல் மாதிரி
75.	data link layer	දත්ත සබැඳි ස්ථරය	தரவு இணைப்பு அடுக்கு
76.	data manipulating language (DML)	දත්ත සැසුරුම් වස	தரவு கையாளல் மொழி
77.	data migration	දත්ත පරිවහනය	தரவு பெயர்ச்சி
78.	debugging	නිදොස් කිරීම	வழு நீக்கல்
79.	decision support system (DSS)	තීරණ සහාය පද්ධති	தீர்மான உதவு முறைமை
80.	declarative	ප්‍රකාශනමය	அறிவிப்பு
81.	default values	පෙරනිම් අගය	இயல்புநிலை மதிப்பு
82.	defragmentation	ප්‍රතිවිඛේදනය	துணிக்கை நீக்கல்
83.	demodulation	විචුර්ජනය	பண்பிறக்கம்
84.	device	උපාංගය / උපකුමය	சாதனம்
85.	device driver	උපාංග ධාවක මෘදුකාංග	சாதனச் செலுத்தி
86.	digital	අංකිත	இலக்க முறை
87.	digital camera	අංකිත කැමරාව	இலக்கமுறைப் படக்கருவி
88.	digital economy	අංකිත ආර්ථිකය	இலக்கமுறைப் பொருளாதாரம்
89.	digitizer	සංවිකානකතය	இலக்கமாக்கி
90.	direct implementation	සෘජුස්ථාපනය	நேரடி அமுலாக்கம்
91.	disk formatting	තැටි/ඩිස්ක හැඩසවි හැස්වීම	வட்டு வடிவமைப்பு
92.	distortion	විකෘතිය	திரிபு

93.	distributive law	பிசுபக நகாச	பங்கீட்டு விதி
94.	document flow diagram	தேவக வரீதீ சபகக	ஆவணப் பாய்ச்சல் வரைபடம்
95.	domain	பசும	ஆள்களம்
96.	domain name server (DNS)	பசுமீ நாம சீவாடாகக	ஆள்களப் பெயர் சேவையகம்
97.	domain name system (DNS)	பசுமீ நாம சடீவிக	ஆள்களப் பெயர் முறைமை
98.	dynamic host configuration protocol (DHCP)	தகிக டிரக சாடுக கியூபிடுக	மாறும் விருந்தோம்பி உள்ளமைவு நெறிமுறை
99.	dynamic web page	தகிக வெபீ சிடு	இயக்குநிலை வலைப்பக்கம்
100.	e-commerce	பீடசூவீ வாகிசக	மின் வர்த்தகம்
101.	economical feasibility	ஈர்பீக கைசகாலி	பொருளாதாரச் சாத்தியப்பாடு
102.	elementary process description (EPD)	இடுக கியூபிடு பீசீகரக	அடிப்படைச் செய்முறை விபரிப்பு
103.	e-market place	ஔ-வெலுட சோல	இலத்திரனியல் சந்தை இடம்
104.	encryption	ஒசீக கீகக	மறைகுறியாக்கம்
105.	enterprise resource planning system (ERPS)	பசவகாச கசீசவீ கரூசூதீ சடீவிக	நிறுவன மூலவள திட்டமிடல் முறைமை
106.	entity	ஔர்பக/ஔகிஔகவீவக/கவீகாலி	நிலைபொருள்
107.	entity identifier	ஔர்பக/ஔகிஔகவீவக வலுதீவக	நிலைபொருள் அடையாளங்காட்டி
108.	entity relationship (ER) diagram	ஔர்பக கசீவீவீகா ரூசசபக	நிலைபொருள் உறவுமுறை அட்டவணை
109.	executable	கியூவீக கல வகீ	இயக்கத்தகு
110.	executive support system (ESS)	பீடாகக ககாச சடீவிக	நிறைவேற்று உதவு முறைமை
111.	expert system	பீசீசூசூ சடீவிக	நிபுணத்துவ முறைமை







182.	least significant	අඩුමවෙසෙසි	சிறும மதிப்பு
183.	legend	විස්තර පාඨය	குறி விளக்கம்
184.	life cycle of data	දත්ත ජීවන චක්‍රය	தரவு வாழ்க்கை வட்டம்
185.	light emitting diode(LED) display	ආලෝක විමෝචක දියෝඩ සන්දර්ශකය	ஒளிகாலும் இருவாயித் திரை / ஒளி உமிழும் இரு முனையம்
186.	linked allocation	සබැඳි විභාජනය	இணைப்பு ஒதுக்கீடு
187.	linker	සන්ධාරකය	இணைப்பி
188.	liquid crystal display(LCD)	ද්‍රවස්ඵරික සන්දර්ශකය	திரவப்பளிங்குக் கணிணித் திரை
189.	list	ලැයිස්තුව	பட்டியல்
190.	liveware	ජීවංග	உயிர் பொருள்
191.	local publishing	ස්ථානීය ප්‍රසිද්ධි කිරීම	உள்ளக வெளியீடு
192.	local area network (LAN)	ස්ථානීය ප්‍රදේශ ජාලය	இடத்தூரி வலையமைப்பு
193.	logic gate	තාර්කික ද්වාරය	தர்க்கப் படலை
194.	Logical Data Modeling( LDM)	තාර්කික දත්ත ආකෘතිකරණය	தர்க்கத் தரவு மாதிரியுருவாக்கல்
195.	logical data structure	තාර්කික දත්ත ව්‍යුහය	தர்க்கத் தரவுக் கட்டமைப்பு
196.	logical design tools	තාර්කික සැලසුම් මෙවලම්	தர்க்க வடிவமைப்புக் கருவி
197.	looping	ලූපනය	வளைய வரல்
198.	machine code	යන්ත්‍ර කේතය	இயந்திரக் குறியீடு
199.	machine-machine coexistence	යන්ත්‍ර-යන්ත්‍ර සහපැවැත්ම	இயந்திர- இயந்திர ஒருங்கிருத்தல்
200.	magnetic ink character reader( MICR)	චුම්බකිත තීන්ත අනු ලකුණු කියවනය	காந்த மை எழுத்துரு வாசிப்பான்
201.	magnetic stripe reader	චුම්බක තීරු කියවනය	காந்தப்பட்டி வாசிப்பான்
202.	magnetic tape	චුම්බක පටිය	காந்த நாடா
203.	malware	අහිඤ්ඨ මාදුකාංග	தீம்பொருள்





250.	optical mark reader (OMR)	புறக்கூறு கீயலிதழ	காந்த மை எழுத்துரு வாசிப்பான்
251.	output	புறக்கூறு	வெளியீடு
252.	packet switching	பேட்டி இலிமார்லி	பொதி மடைமாற்றல்
253.	paging	பிடுகலல	பக்கமிடல்
254.	paradigm	இசுமூடர்லல/புறக்கூறு/புறக்கூறு	கோட்பாட்டுச் சட்டகம்
255.	parallel implementation	சுமூல்கர் சீர்பல	சமாந்தர அமுலாக்கம்
256.	parameter passing	பரூமி கீயலி	பரமாளக கட்டதல்
257.	parity	சுமூலி	சமநிலை
258.	password	இர பகல	கடவுச்சுால்
259.	payment gateway	லெலி லிசுட் டீலர்ல	பணக் கொடுப்பலவு நுழைவாயில்
260.	periodic refreshing	காலிற் புலெல்கல்கல	காலமுறை புதுப்பித்தல்
261.	peripheral device	பரல்கல லலலல / லலலல	புறச் சாதனம்
262.	phablet	லலலல	பெல்லட்
263.	phased implementation	கலல்கல்கல / பிலலர் லுலல்கல்கல	கட்ட அமுலாக்கல்
264.	phase modulation	கலல இல்கல	நிலை பண்பேற்றம்
265.	phishing	லலலல	வழிப்பறித்தல்
266.	physical layer	லலலல சீர்பல	பெளதீக அடுக்கு
267.	physical memory	லலலல மலலல	பெளதீக நிலைவகம்
268.	pilot implementation	கிலலல சீர்பல / கிலலல லுலல்கல்கல	முன்னோடி அமுலாக்கல்
269.	piracy	லலலலல/ லுலலலல	கலவு
270.	pirated software	லலலல/லுலலலல லலலலல	திலுட்டு மென்புலருள்
271.	plagiarism	லுலலல/லலலல லலலலல	கருத்துத் திலுட்டு
272.	point to point connection	சுபு லலலல சலலலலலலல	ஒன்றுடனொன்று இணைப்பு

273.	pointing device	දැක්වුම් උපාංගය	கட்டி சாதனம்
274.	port	කෙවෙතිය	வாயில், துறை
275.	portable external hard disk	ජංගම/සුවහකීය බාහිර දෘඩ තැටිය	காவத்தகு புற வன்தட்டு
276.	portal	ද්වාරය/ ආමුඛද්වාරය	வலைவாசல்
277.	Point of sale (POS) machine	විකුණුම් පොල යන්ත්‍ර	விற்பனை இட இயந்திரம்
278.	postulate	උපකල්පනය	எடுகோள்
279.	power supply	විදුලි සැපයුම/ජව සැපයුම	மின் வழங்கி
280.	presence check	තර්ථතා පරීක්ෂාව	இருத்தல் சரிபார்த்தல்
281.	presentation layer	සමර්පන/ඉදිරිපත් කිරීම් ස්ථරය	முன்வைப்பு அடுக்கு
282.	primary key	ප්‍රාථමික/මුලික යතුර	முதன்மைச் சாவி
283.	primitive data type	ප්‍රාථමික දත්ත වර්ගය	பூர்வீகத் தரவு வகை
284.	privacy	පෞද්ගලිකත්වය	அந்தரங்கம்
285.	private key	පෞද්ගලික යතුර	பிரத்தியேகச் சாவி
286.	process	ක්‍රියාවලිය/ක්‍රියායතනය/ සැකසුම	செயல்/ முறைவழியாக்கல்
287.	process control block(PCB)	ක්‍රියායතන පාලන ඛණ්ඩය	செயல் கட்டுப்பாட்டுத் தொகுதி
288.	process management	ක්‍රියායතන කළමනාකරණය	செயல் முகாமைத்துவம்
289.	process states	ක්‍රියායතන තත්ත්ව	செயல் நிலை
290.	process transition	ක්‍රියායතන සංක්‍රමණය	செயல் நிலைமாறல்
291.	product commercialization	විෂ්පාදන වාණිජකරණය	தயாரிப்பு வர்த்தகமயமாக்கல்
292.	product of sum (POS)	වේතනයන්ගේ ඉඹිතය	கூட்டுத்தொகையின் பெருக்கம்
293.	program translator	ක්‍රමලේඛ පරිවර්තක	செய்நிரல் மொழிபெயர்ப்பான்
294.	proprietary	හිමිකම් සහිත	தனியுரிமை
295.	protocol	නියමාවලිය	நடப்பொழுங்கு

296.	prototyping	இலாகாக்கொடுப்பு	மூலவகை மாதிரி
297.	proxy server	நினைவுகளை சேலாடாக்கை	பதிலாளர் சேவையகம்
298.	pseudo code	பொருள் கையெழுத்து	போலிக்குறி
299.	public switch telephone network (PSTN)	பொது சேலிவு டூர்ஊடுகை சாலை	பொது ஆளியிடப்பட்ட தொலைபேசி வலையமைப்பு
300.	public key	பொது கரு	பொதுச் சாவி
301.	pulse code modulation	சேலுக்கை கையெழுத்து	துடிப்புக்குறி பண்பேற்றம்
302.	pulse width modulation	சேலுக்கை பிஊடுகை கையெழுத்து	துடிப்பு அகலப் பண்பேற்றம்
303.	radio button	பிஊடுகை கையெழுத்து	ரேடியோ பொத்தான்
304.	random access memory (RAM)	கையெழுத்து சேலிவு கையெழுத்து	தற்போக்கு அணுகல் நினைவகம்
305.	range check	பரகை பரிசீலனை	வீச்சு சரிபார்த்தல்
306.	rapid application development (RAD)	கையெழுத்து கையெழுத்து கையெழுத்து	தூரித பிர்யோகை விருத்தி
307.	read only memory (ROM)	படிக்கை கையெழுத்து	வாசிப்பு மட்டும் நினைவகம்
308.	real time	கையெழுத்து கையெழுத்து	நிகழ்நேரம்
309.	record	கையெழுத்து கையெழுத்து	பதிவு
310.	redo	கையெழுத்து கையெழுத்து	மீளச் செய்
311.	redundancy	கையெழுத்து கையெழுத்து	மிகைமை
312.	reference model	கையெழுத்து கையெழுத்து	வலையமைப்பின் கட்டமைப்பு
313.	refreshing	கையெழுத்து கையெழுத்து	புத்துயிர்ப்பித்தல்
314.	register memory	கையெழுத்து கையெழுத்து	பதிவகம்
315.	relational	கையெழுத்து கையெழுத்து	தொடர்பு, உறவுநிலை
316.	relational model	கையெழுத்து கையெழுத்து	உறவுநிலை மாதிரி
317.	relational database	கையெழுத்து கையெழுத்து	உறவுநிலை தரவுத்தளம்
318.	relational instance	கையெழுத்து கையெழுத்து	தொடர்பு முறை எடுத்துக்காட்டு

319.	relational schema	சமீகிவ்வொ பரிபாபிக ஁பகை	தொடர்பு முறைத் திட்டம்
320.	relationship	சமீகிவ்வொபிச	தொடர்புமுறை
321.	remote	஁ர஁஁	தொலை, தூர
322.	render	பி஁஁஁	வழங்கு
323.	repeater	புற஁஁஁஁	மீளி, மீட்டி
324.	repetition	புற஁஁஁஁	மீள் செயல்
325.	reset button	புற஁஁஁஁ ஁஁஁஁஁஁	மீளமைப்புப் பொத்தான்
326.	retrieve	஁஁஁஁஁஁	மீளப்பெறு
327.	return value	புற஁஁஁஁஁ ஁஁஁	திரும்பல் பெறுமானம்
328.	reverse auction	புற஁஁஁஁஁஁஁஁	஁திர்தாற்று ஁லம்
329.	ring topology	஁஁஁ ஁஁஁஁஁	வளைய இடத்தியல்
330.	router	஁஁ ஁஁஁஁஁	வழிப்படுத்தி, வழி஁஁஁஁஁஁
331.	routing	஁஁ ஁஁஁஁஁஁஁	வழி஁஁஁஁஁஁஁
332.	scanner	஁஁஁஁஁஁஁஁	஁஁஁஁஁ ஁஁஁஁஁
333.	scheduler	஁஁஁஁஁஁஁஁	஁஁஁஁஁஁஁஁஁஁
334.	scope of variable	பி஁஁஁஁஁஁஁஁	மாறி செயற்பரப்பு
335.	query	பி஁஁஁஁஁	வினவல்
336.	selection	஁஁஁஁஁	தெரிவு
337.	selector	பி஁஁஁஁	தேர்வி, தேர்஁஁஁஁஁஁஁
338.	sensor	஁஁஁஁஁஁஁஁	஁஁஁஁
339.	sequence	஁஁஁஁஁஁	தொடர்
340.	sequential circuit	஁஁஁஁஁஁஁஁஁஁஁	தொடர்஁஁஁஁஁
341.	sequential search	஁஁஁஁஁஁஁஁஁஁	வரி஁஁஁஁஁஁஁஁஁஁
342.	server	஁஁஁஁஁஁஁஁஁ / ஁஁஁஁஁஁஁஁	஁஁஁஁஁஁஁஁
343.	session layer	஁஁஁஁஁஁஁஁	஁஁஁஁஁஁஁஁஁஁
344.	sharable pool	஁஁஁஁஁஁஁஁஁஁	஁஁஁஁஁஁஁஁஁஁
345.	sign-magnitude	஁஁஁஁஁஁஁஁஁஁஁ / ஁஁஁஁஁஁஁஁	஁஁஁஁஁஁஁஁஁஁஁஁஁

		பரிமாணம் / அளவு பரிமாணம்	
346.	single user-multi task	ஐக பரிசீலம்-வக கார்டம்	தனிப்பயனர்-பற்பணி
347.	single user-single task	ஐக பரிசீலம்-ஐக கார்டம்	தனிப்பயனர்-தனிப்பணி
348.	smart card	கூறு கார்டம்	கூட்டகை அட்டை
349.	smart phone	கூறு டூல்கம்	கூட்டகைத் தொலைபேசி
350.	smart system	கூறு படிவம்	கூட்டகை முறைமை
351.	social networking	கூறு சமூகம்	சமூக வலையமைப்பாக்கல்
352.	software	கூறு	மென்பொருள்
353.	software agent	கூறு கார்டம்	மென்பொருள் முகவர்
354.	sort	கூறு	வரிசைப்படுத்து
355.	source	கூறு	மூலம்
356.	spiral model	கூறு அமைவு	கூறு மாதிரி
357.	spooling	கூறு	கூறுதல்
358.	Star topology	கூறு கட்டமைவு	விண்மீன் இடத்தியல்
359.	stepwise refinement	கூறு கட்டமைவு	படிமுறை நீக்கல்
360.	storage	கூறு	சேமிப்பு
361.	storage allocation	கூறு பரிசீலம்	சேமிப்பு ஒதுக்கல்
362.	stored program concept	கூறு கூறு கட்டமைவு	சேமிக்கப்பட்ட செய்நிரல் எண்ணக்கரு
363.	structure	கூறு	கட்டமைப்பு
364.	structure chart	கூறு கட்டமைவு	கட்டமைப்பு வரைபடி
365.	structured	கூறு	கட்டமைப்புவக
366.	structured query language( SQL)	கூறு கட்டமைவு கட்டமைவு	கட்டமைப்பு வினவல் மொழி
367.	submit button	கூறு கட்டமைவு	சமர்ப்பித்தல் பொத்தான்
368.	subnet mask	கூறு கட்டமைவு	உபவகை மறைமுகம்
369.	sub-netting	கூறு கட்டமைவு	உபவகையமைப்பு

370.	sub-program	௨௪-நுழைவேடு	துணைச் செய்நிரல்
371.	sum of products (SOP)	ஒலீதலல் லேதல	பெருக்கங்களின் கூட்டுத்தொகை
372.	supply chain management	கூபதூலீ தூத கதூதகாதரணல	வநீநீயோக சங்கிலித்தொடர் முகாமைத்துவம்
373.	swapping	தூதீதரணல	இடமாற்றல்
374.	switch	தீலீலல	ஆளி
375.	syntax	கார்க ரீதீ	தொடரியல்
376.	system development life cycle(SDLC)	தடீதீதீ கூலீரீதல தீலத லதூத	முறைமை வநூத்தீ வாழ்க்கை வட்டம்
377.	table	லதூல	அட்டவணை
378.	table check constraint	லதூ தரீதூ கூலீதீதல	அட்டவணை சரிபார்த்தல் கட்டுப்பாடு
379.	tag	௨தூதல	ஒட்டு
380.	Technical feasibility	தாநீதலீத லதலதால	தொழினூட்பச் சாத்தியக் கற்கை
381.	telecommuting	தூதீதீ கூலீதல / தூத கதீதீலீதல	தொலைசெயல்
382.	testing strategy	தரீதூதூ ௨தூதல	பரீதீதீதல் உபாயம்
383.	text and font	தால கத தீதூத	வாசகமும் எழுத்துருவும்
384.	text formatting	தால கததீதீத ததீதீத	வாசக வதலமைப்பு
385.	text input	தால ததூத	வாசக உள்ளீடு
386.	normal form	தூதல தலதீதால	இயல்பாக்கல் வதலம்
387.	thumbnail	கூதலீ தூ	குறும்படம்
388.	time division modulation (TDM)	கால தலதூதீ தூதீதல	நேரப் பிரிவுப் பண்பாக்கம்
389.	time sharing	கால தீதலதல	நேரப்பகிர்வு
390.	timing	கால தலதல	நேரக்கணிப்பு
391.	top down design	இதூதீ தீதீ காலதூத	மேலிருந்து கீழான வதலமைப்பு

392.	touch pad	சீபர்ஷை டௌபட / சாட்கை	தொடு அட்டை
393.	touch screen	சீபர்ஷை கீர்ஷ	தொடுதிரை
394.	transaction processing system (TPS)	ஷெஷேஷு ஷஷஷுஷீ ஷஷீஷீ	பரிமாற்றர் செயலாக்க முறைமை
395.	transitive dependency	ஷஷுஷீ பரஷஷீஷை	மாறும் சார்பு நிலை
396.	transport layer	புலாஷை சீபர்ஷ	போக்குவரத்து அடுக்கு
397.	transport protocol	புலாஷை திஷலாவிஷு	போக்குவரத்து நடப்பொழுங்கு
398.	tuple	டௌஷுஷிஷை/ஷீஷு	பதிவு/நிரை
399.	twisted pair	அஷீர் டுஷு	முறுக்கிய சோடி
400.	two's compliment	ஷேஷேஷி அஷுபுர்ஷை	இரண்டின் நிரப்பி
401.	type check	புரூஷ பர்ஷீஷை	வகை சரிபார்த்தல்
402.	constraint	ஷஷுஷிஷை	கட்டுப்பாடு வகை
403.	ubiquitous computing	ஷர்ஷிஷி அஷைஷை	எங்கும் வியாபித்த கணிமை
404.	undo	அஷுஷி கீர்ஷ	செயல்தவிர்
405.	unguided media	திஷலு ஷைவிஷ லாமிஷ	வழிபடுத்தப்படாத ஊடகம்
406.	uni-casting	ஷஷு ஷுஷீஷுஷை	தனிப்பரப்பல்
407.	unicode	டூஷிஷுஷி/ ஶீஷுஷை	ஒற்றைக்குறி முறை
408.	unique constraint	அஷைஷ ஷஷுஷிஷை	தனித்துவக் கட்டுப்பாடு
409.	unit testing	ஶீஷை பர்ஷீஷை	அலகுச் சோதனை
410.	universal	ஷா்ஷு	பொது
411.	updating	லாவிஷுஷை கீர்ஷ	தற்காலப்படுத்தல்
412.	user	பர்ஷுஷை	பயனர்
413.	user defined	பர்ஷுஷை தீர்லாஶீ	பயனர் வரையறை
414.	validation	விஷுஷு கீர்ஷ	செல்லுபடியாக்கல்
415.	variable	ஶீவிஷை	மாறி
416.	very large scale integration (VLSI)	ஓலா ஶீஷை பர்ஷுஷை அஷுஷு	மிகப் பெரியளவிலான ஒருங்கிணைப்பு

417.	video graphic adapter (VGA)	புது பிளாக் அனுபவம்	காணொளி வரையி பொருத்தி
418.	virtual community	அதன் பகுதி	மெய்நிகர் சமூகம்
419.	virtual memory	அதன் மனம்	மெய்நிகர் நினைவகம்
420.	virtual storefront	அதன் வெளியுட்ப்பு	மெய்நிகர் கடைமுடிப்பு
421.	waterfall model	புது அமைதி	நீர் வீழ்ச்சி மாதிரி
422.	wave length	தரம் அமைதி	அலை நீளம்
423.	web portal	வெளி உலகம்	வலை வாசல்
424.	web server	வெளி உலகம்	இணைய சேவையகம்
425.	web service provider	வெளி உலகம்	இணைய சேவை வழங்குனர்
426.	white box testing	புது அமைதி	வெண்முட்டிச் சோதிப்பு
427.	world wide web(WWW)	புது அமைதி	உலகளாவிய வலை
428.	uniform resource locator (URL)	புது அமைதி	சீர்மை வள இருப்பிடங்காட்டி
429.	uniform resource identifier(URI)	புது அமைதி	சீர்மை வள அடையாளங்காட்டி

