

Drag and

Drop

Class - 5

- The Recall List box displays all the output that the users have written or typed in the command input box.
- The purple color-coded Looks blocks are used to control a Sprite's appearance.

C. Write the shortcut keys for the following.

The shortcut key for:

- Undo is Ctrl + Z. 2. Bold is Ctrl + B.
- Copy is Ctrl + C. 4. Paste is Ctrl + V.
- Underline is Ctrl + U.
- Select all is Ctrl + A.
- Right alignment is Ctrl + R.

D. Write True or False for the following statements.

- False 2. True 3. True
- True 5. True

Cyber Olympiad

Tick (✓) the correct option for each question.

- (d) 2. (a) 3. (c)
- (b) 5. (c) 6. (d)
- (b) 8. (d) 9. (c)
- (a) 11.(b) 12.(c)
- (c) 14.(d) 15.(a)
- (a) 17.(b) 18.(a)
- (c) 20.(d)

Class 5

Chapter 1 : Generations of Computer

Brain Teaser

- | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| S | E | C | O | N | D | | | | |
| G | E | N | E | R | A | T | I | O | N |
- | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| F | O | U | R | T | H | | | | |
| G | E | N | E | R | A | T | I | O | N |
- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| C | O | L | O | S | S | U | S |
|---|---|---|---|---|---|---|---|
- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| S | U | P | E | R | | | |
| C | O | M | P | U | T | E | R |

Rapid Fire

- Reynold B. Johnson is regarded as the father of the disk drive.

- The main working component of second-generation computers was transistor.
- A microcomputer is also known as the personal computer.
- Supercomputers are used for weather forecasting.

Let's Review

A. Tick (✓) the correct option.

- (b) 2. (a) 3. (c)
- (d) 5. (d)

B. Write True or False for the following statements.

- True 2. False 3. True
- False 5. True

C. Give two examples of each of the following.

Two examples of the:

- first generation computers are UNIVAC-I and ENIAC.
- second generation computers are UNIVAC 1108 and IBM 7077.
- third generation computers are Alter and IBM 370.
- fourth generation computers are desktop and laptop.

D. Answer the following questions.

- Computers that used transistors instead of vacuum tubes are called the second generation computers. The use of transistors made computers smaller, faster, more reliable and cheaper.
- The mainframe computers are the powerful multiuser computers capable of supporting many hundreds or thousands of users simultaneously. They have faster speed, bigger memory and mass storage capacity. They are used by big companies and enterprises.
- The main features of the fourth-generation computers are:
 - They are microprocessor-based computers.
 - They use microprocessor chips called VLSI (Very Large Scale Integration).
 - They are compact, powerful, fast and much cheaper.
- A supercomputer is the fastest and most powerful computer. It supports several

- The blank space around the edges of page called margin
- MS Word has two types of orientations.
- The Line Spacing button is found in Paragraph group.






Brain Teaser

- | | | | | | | |
|---|---|---|---|---|---|---|
| L | I | N | E | | | |
| S | P | A | C | I | N | G |
- | | | | | | | |
|---|---|---|---|---|---|---|
| C | O | L | U | M | N | S |
|---|---|---|---|---|---|---|
- | | | | | | |
|---|---|---|---|---|---|
| I | N | S | E | R | T |
| T | A | B | | | |

Let's Review

- Tick (✓) the correct option.
 - (b)
 - (d)
 - (c)
 - (c)
 - Match the following.
 - (c)
 - (d)
 - (a)
 - (b)
 - Write True or False for the following statements.
 - False
 - False
 - True
 - True
 - False
 - False
 - Answer the following questions.
 - Margins are the space between the edge of the page and the document text on all the four sides. We can access page margin settings options from the Page Setup group in the Page Layout Tab.
- The two types of page orientation are portrait orientation and landscape orientation. Portrait page orientation is where the vertical size is greater than the horizontal size. Landscape page orientation is where the horizontal size is greater than the vertical size.
 - WordArt is a text decorative styling utility in MS Word that we can add to a document. We can make changes to WordArt, such as the font size and the text colour, by using the drawing tools options available automatically after you insert or select the WordArt in a document.
 - The steps to divide the text into columns are:
 - Select the text.
 - Click the Layout tab in Page Setup group.
 - Click the Columns tab in Page Setup group. A list appears on the screen.
 - Click the option you want to apply, say two columns. The selected text gets divided into two columns.
 - The steps to insert a picture from your file are:
 - Click on the **Insert** tab.
 - First click the **Picture** option and then **This Device** option from the **Illustrations** group. The **Insert Picture** dialog box appears.
 - Select the picture.
 - Click the **Insert** button. The selected picture will be inserted in your document.

Activity Time

Icon	Button name	Group	Tab	Use
	Margin	Page Setup	Page Layout	It is used to change document margin.
	Clip Art	Illustrations	Insert	These graphic pictures can be added in text.
	Insert picture	Illustrations	Insert	It is used to insert pictures from a file or folder.
	Orientation	Page Setup	Page Layout	It is used to change layout of the printing page.
	WordArt	Text	Insert	It is used to decorate text such as font style.

Rapid Fire

1. Title always starts with the word To.
2. A procedure cannot have arithmetic operators.
3. File-Erase option in File menu erases procedures.
4. You can load the saved procedure by using LOGO command.

Activity Time

The students will do it themselves.

Let's Review

- A. Identify the part of procedure for the following commands.
1. Body 2. Body 3. End
- B. Tick (✓) the correct names for procedure and cross (X) out the wrong ones.
1. 12 March X 2. Akash ✓
3. 5th Row X 4. FD X
5. RT 90 X 6. TO Square ✓
- C. Answer the following questions.
1. MSW LOGO is a graphic oriented programming language which interprets on the basis of computer language LOGO.
 2. A LOGO procedure is a set of LOGO commands given one after the other to perform a particular task and referred by a specific name.
 3. Some of the rules for writing a procedure are given below:
 - A procedure can have letters, numbers and symbols.
 - The first character of the procedure's name should always be a letter.
 - A procedure's name cannot include names of any LOGO commands.
 - A procedure cannot have blank spaces and arithmetic operators.
 4. Let us draw an equilateral triangle. An equilateral triangle has all sides equal and each angle 60°. The procedure for making a triangle is:
 - Type To TRIANGLE in the input box and press the Enter key.

- Type REPEAT 3FD 50RT 60 command.
- Type END in the input box and click the OK button.

An equilateral triangle will appear on the screen.

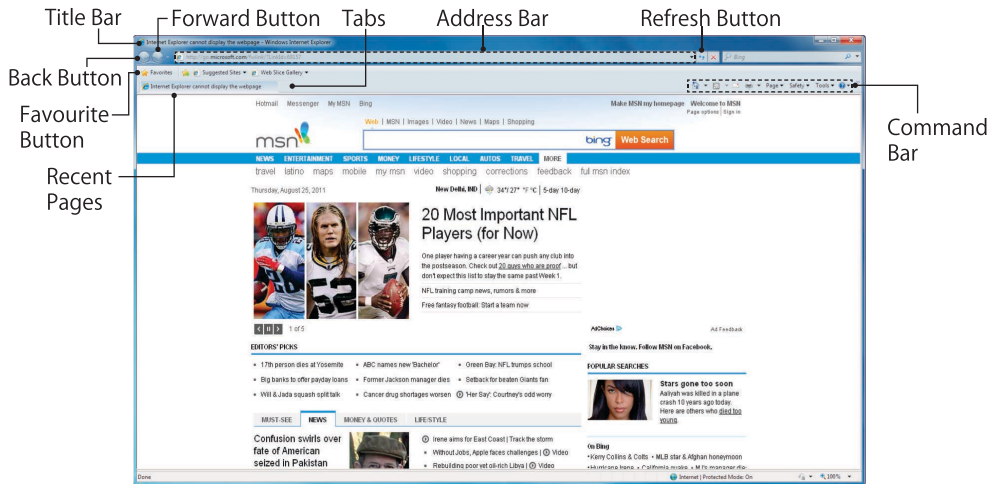
5. Two ways of writing a procedure:
- (a) **Using the a REPEAT command:** Let us draw a square. The steps to write a procedure for drawing a square are:
- Type TOSQUARE and press the Enter key. The TO mode appears on the screen.
 - Type REPEAT4 [FD100 RT90]
 - Type END in the input box.
 - Click the OK button and press the Enter key. The LOGO screen displays a square.
- (b) **Procedure with Parameters:** In this method, we can use one procedure to draw squares of different sizes. Here is an example. Type the following:
- TO SQUARE :SIZE
 - REPEAT 4 [FD :SIZE RT 90]
 - END

Model Test Paper — I

- A. Tick (✓) the correct option.
1. (a) 2. (c) 3. (d) 4. (b)
5. (b) 6. (a) 7. (a) 8. (b)
- B. Answer the following questions.
1. A mainframe computer is one of the fastest and most powerful computers.
 2. Screen saver is a moving graphic image that appears on the screen if the computer is idle for some time.
 3. In banks, computers are used to maintain account records of customers. Computers assist bankers to stay in touch with banking policies.
 4. Gadgets are electronic, electrical or mechanical devices that we use frequently in our routine life.
 5. Margins are the space between the edge of the page and the document text on all the four sides. We can access page margin settings options from the Page Setup group in the Page Layout Tab.

Activity Time

The labelled picture is given below.



Activity Time

The words related to computer networks and Internet are circled in the following grid.

A	D	I	C	H	J	A	C	W	W	W	B	C	H	A	T
W	G	U	F	L	A	N	F	G	B	E	I	H	W	D	J
E	N	R	K	E	U	K	L	R	Q	P	M	L	E	N	M
B	O	L	H	Y	P	E	R	L	I	N	K	X	B	O	K
P	P	T	S	T	Y	Z	A	F	B	C	D	E	S	L	M
A	S	U	R	G	Y	X	W	Q	W	S	R	W	I	O	A
G	V	V	W	A	N	Z	A	E	M	A	I	L	T	P	N
E	H	J	Y	X	K	I	B	V	Z	U	T	Q	E	N	M

Rapid Fire

- The popular websites which provide the facility to send and receive mails are: www.yahoo.com, www.gmail.com and Outlook.com
- E-mail stands for Electronic mail.
- WWW button is used for URL address of a particular site.

Let's Review

- A. Tick (✓) the correct option.
- (c)
 - (a)
 - (b)
 - (b)
- B. Write True or False for the following statements.
- False
 - False
 - True
 - True
 - False

C. Answer the following questions.

- A computer network is a set of computers connected together through a communication media to exchange information and data.
- MAN, stands for Metropolitan Area Network, is a computer network usually spanning a few local area networks using high speed backbone technologies.
- To use the Internet, we need these four things: Telephone line, modem, computer, and an ISP (Internet Service Provider).
- A search engine is a software system (website) designed to carry out web searches using the Internet.
- A URL, stands for Uniform Resource Locator, is the unique address given to a website on WWW.
- The main difference between a web page and a website is that a web page is a single document containing text, images, videos, animation, etc., whereas a website is a collection of related web pages.

Brain Teaser

- SEARCH ENGINE
- CHAT
- ADDRESS BAR
- URL
- WEBSITE

Activity Time

The students will do it themselves.

Chapter 7 : Algorithm and Flowcharts

Rapid Fire

1. We use the connector box (circular in shape) to connect two statements situated at different places in a program.
2. In a flowchart, the flow lines are arrows which connect two boxes. They determine the flow of the instructions used in a program.
3. The decision box is used to display final result.
4. The processing box is used to show the processing steps in a flowchart.

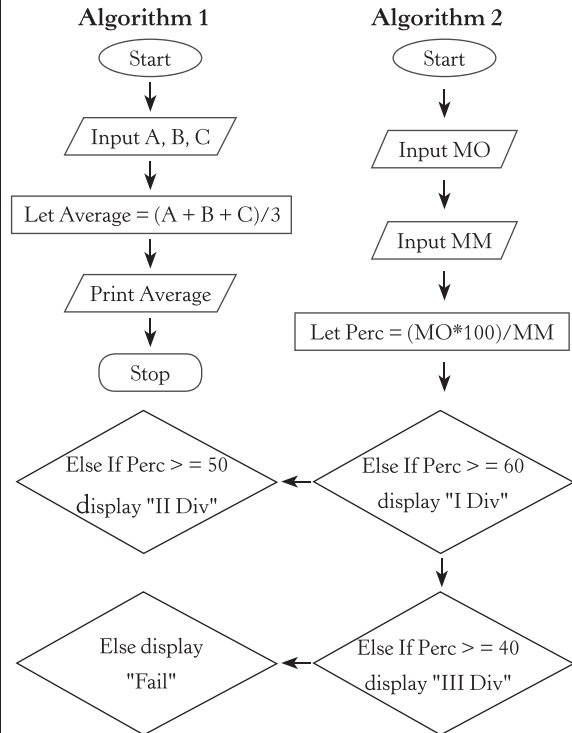
Let's Review

- A. Tick (✓) the correct option.
1. (c)
 2. (c)
 3. (b)
 4. (a)
 5. (b)
- B. Write True or False for the following statements.
1. False
 2. False
 3. True
 4. True
 5. True
- C. Match the following.
1. (d)
 2. (a)
 3. (b)
 4. (c)
- D. Answer the following questions.
1. An algorithm is a sequence of steps used for solving a problem.
 2. A flowchart is a pictorial representation of the separate steps of a process in sequential order, used for solving a specific problem.
 3. The input/output box is used to show the input and output related steps in a flowchart.

4. An algorithm is a procedure or set of rules that defines how a program is to be executed, whereas a flowchart is a pictorial representation of the steps taken in solving a problem.

Activity Time

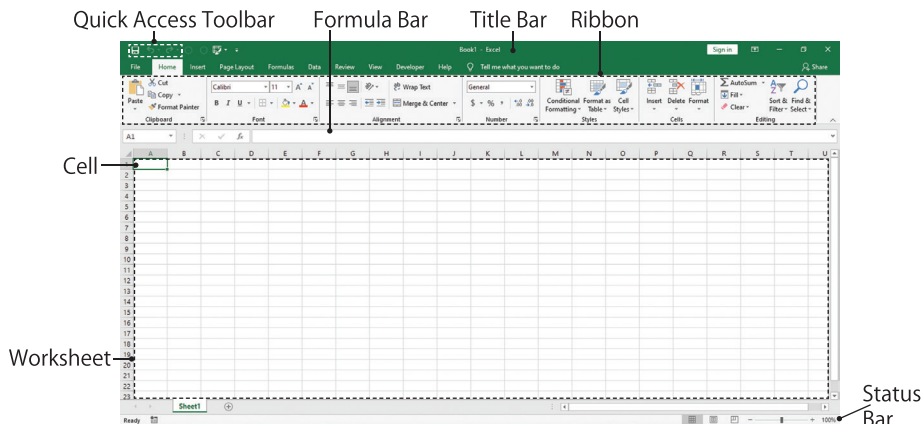
The flowcharts for the given algorithms are given.



Chapter 8 : Introduction to MS Excel 2016

Activity Time

The labelled picture is given below.



Brain Teaser

Terms used in Excel are circled in the grid.

A	W	O	R	K	B	O	O	K	H
G	H	B	N	M	J	I	K	M	F
A	R	C	C	E	L	L	F	L	O
T	O	A	D	E	B	F	G	C	R
E	W	N	U	M	B	E	R	S	M
X	E	Q	V	U	R	T	S	O	U
T	D	C	O	L	U	M	N	P	L
W	O	R	K	S	H	E	E	T	A

Rapid Fire

1. There are 10,48,576 rows and 16,384 columns in Excel 2016 worksheet
2. The default name of workbook in Excel 2016 is Book1, Book2, Book3, etc. But we can easily rename them.
3. We can enter only three types of data in MS Excel worksheet.: numbers, text, and formulae.

Let's Review

- A. Tick (✓) the correct option.
1. (d) 2. (c) 3. (b)
 4. (d)
- B. Write True or False for the following statements.
1. True 2. True 3. False
 4. False 5. True
- C. Answer the following questions.
1. A spreadsheet software is a special type of software that results and analyses the entered data arranged in rows and columns.
 2. In Excel, a worksheet is a collection of cells where we keep and manipulate data.
 3. In Excel, a sheet, also called a worksheet, is a single page or a document with the collection of cells to help us organize the data.
 4. In Excel, the formula box displays the cell contents along with the formulae written for the particular cell.
 5. Steps to create a new worksheet:
 - Click the File tab.
 - Click the New option. A list of templates appears.

- Click the Blank workbook from the given templates.

The new worksheet gets opened on the screen.

6. Steps to save the workbook:
 - Click the File tab.
 - Click the Save option. The Save As dialog box appears.
 - Click This PC option.
 - Type the name of the file in the File name box.
 - Click the Save button.

The workbook gets saved in the given location.

Chapter 9 : More on Scratch

Rapid Fire

1. There are 77 stack blocks in Scratch.
2. Cap blocks are shaped with a notch at the top and a flat bottom.
3. Pen blocks are used to allow a Sprite to draw shapes, plot coloured pixels, and so forth on the screen.

Let's Review

- A. Tick (✓) the correct option.
1. (a) 2. (c) 3. (d)
 4. (a) 5. (c)
- B. Fill in the blanks with the correct words given below.
1. A **looping** block repeats a set of blocks a given number of times until the condition is met.
 2. **Looks** blocks affect how your sprites appear on the Stage.
 3. A Stake block is a **rectangular** block.
 4. In Scratch, the Sprite moves on the **Stage** when we run the program.
 5. An **event-driven** script is one that executes when a specified event occurs.
- C. Write True or False for the following statements.
1. False 2. False 3. False
 4. False 5. True
- D. Answer the following questions.
1. Conditional blocks are control blocks that use a condition to determine whether a Boolean condition supplied by the programmer is true or false.

- In Scratch, direction is measured in degrees ($^{\circ}$) and it ranges from -180° to 180° (both pointing down). The default value for the direction is 90° , pointing right. Whether the sprite is actually visually rotated or not is determined by the sprite's rotation style.
- In Scratch, scripts are programs that control Sprites. Scripts are programmed to make the Sprites do things.
- Motion blocks are used for the movement and rotation a Sprite.
- Control Blocks are programmed for functioning the Sprites as long as certain conditions are met. These blocks do not do anything until users use them as part of a script, but click the Create Clone of Myself block. Similar to what happened when clicked the Stamp block under the Pen Block category, the two copies of a Sprite, say Cat Sprite, are on top of one another on the Stage.

Note: To know the functioning of different types of Control blocks, see page 91 of the book.

- Reporter blocks are coded blocks that have either rounded or angled sides. They are designed to provide information for other code blocks to process.

Activity Time

The students will do it themselves.

Chapter 10 : Artificial Intelligence (Machine Learning)

Let's Review

- Tick (✓) the correct option.
 - (d)
 - (a)
 - (a)
 - (c)
 - (b)
- Fill in the blanks with the words given below.
 - Artificial intelligence develops **machines** that can accomplish tasks that require human intelligence.
 - Unsupervised learning uses **unlabelled** data.
 - Cortana is a **virtual** personal assistant.
 - Sentiment analysis application is used to analyse a **review** based website.
 - Feed Forward Neural Network helps banks know **fraud** transactions.

- Write True or False for the following statements.
 - True
 - True
 - True
 - False
 - True
- Answer the following questions.

- Machine learning is an application of artificial intelligence that provides the system the ability to learn and improve automatically from experience without being programmed
- Factors on which our likes or dislikes for listening to a song depend are: intensity, tempo, genre and gender of voice.
- There are many ways to classify machine learning problems. Some of them are supervised learning, unsupervised learning, semi-supervised learning and reinforcement learning.
- Supervised learning algorithms apply past experiences labelled to be trained, whereas unsupervised learning algorithms use neither classified nor labelled data to be trained.
- Machine learning is very useful in the banking sector. It helps prevent fraud and protects accounts from hackers.

Activity Time



Cortana



Google assistant



Siri



Alexa

Model Test Paper — II

- Tick (✓) the correct option.
 - (d)
 - (c)
 - (a)
 - (b)
 - (c)
 - (b)
 - (c)
 - (b)
 - (c)
 - (a)
- Write True or False for the following statements.
 - False
 - False
 - False
 - True
 - False
- Rearrange the jumbled letters to form the correct words.

1. TERMINAL BOX
2. WORDART
3. FLOW LINES
4. CHAT
5. SCRATCH

D. Answer the following questions.

1. A flowchart is a pictorial representation of the separate steps of a process in sequential order, used for solving a specific problem.
2. Search engine is a website which we use to search information on the Internet.
3. An algorithm is a procedure or set of rules that defines how a program is to be executed, whereas a flowchart is a pictorial representation of the steps taken in solving a problem.
4. PowerPoint is a presentation software that helps the users to make presentations.
5. In Excel, a worksheet is a collection of cells where we keep and manipulate data.
6. The main difference between a web page and a website is that a web page is a single document containing text, images, videos, animation, etc., whereas a website is a collection of related web pages.
7. In Excel, the Formula box is a box which shows the cell contents along with the formulae written for that particular cell.
8. Today, the Internet has become a part of our daily life. It is because the use of the Internet makes our life easy, fast and simple.
9. Control blocks are used to control Scripts under certain conditions, which can be done by inserting conditional statements, loops, repeats, and causes.
10. Machine learning is an application of artificial intelligence that provides the system the ability to learn and improve automatically from experience without being programmed.

Cyber Olympiad

Tick (✓) the correct option for each question.

- | | | | |
|---------|---------|---------|---------|
| 1. (d) | 2. (a) | 3. (c) | 4. (b) |
| 5. (c) | 6. (d) | 7. (b) | 8. (d) |
| 9. (c) | 10. (c) | 11. (a) | 12. (b) |
| 13. (c) | 14. (c) | 15. (d) | 16. (a) |
| 17. (a) | 18. (B) | 19. (c) | 20. (d) |

Activity Time

- | | |
|------------------|----------------|
| (a) mouse | (b) joystick |
| (c) drum scanner | (d) microphone |

Brain Teaser

The full form of:

- (a) ROM: Read Only Memory
- (b) RAM: Random Access Memory
- (c) CD: Compact Disc
- (d) DVD: Digital Video/Versatile Disc
- (e) USB: Universal Serial Bus

Rapid Fire

1. **Pen drive** is plug-and-play device that simply plugs into a USB port of a computer.
2. **Web camera** allows you to capture images and input them into the computer.
3. **CPU** is the brain of a computer system.
4. **Touch screen** enables a user to choose available options by simply touching the icon or menu displayed on a computer's screen.

Brain Teaser

1.

D	V	D
---	---	---

 2.

C	P	U
---	---	---
3.

C	O	N	T	R	O	L	U	N	I	T
---	---	---	---	---	---	---	---	---	---	---
4.

D	O	T	M	A	T	R	I	X
---	---	---	---	---	---	---	---	---
5.

P	E	N	D	R	I	V	E
---	---	---	---	---	---	---	---

Let's Review

- A. Tick (✓) the correct option.

1. (c)	2. (a)	3. (c)
4. (a)	5. (b)	
- B. Write T for true and F for false statements.

1. F	2. T	3. F
4. T	5. F	6. F
7. T		
- C. Fill in the blanks.
 1. A **mouse** is a pointing device consisting of a plastic stick mounted on a base.
 2. Microphone contains a device called **amplifier** inside it.