

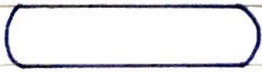
Good Morning Students,

Students, this lesson is for class VIII, for the subject of Computers. Topic is 'Flowchart' which is covered in chapter - 4,

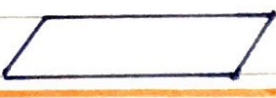
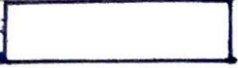
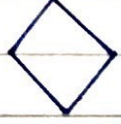
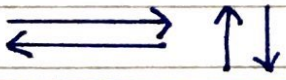
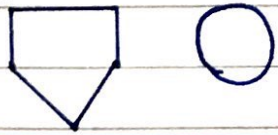
So, I hope all the students are ready for today's lesson. Children in previous assignment we learnt about 'Algorithms'. As we know algorithms are step by step procedure to solve any particular problem. To present these steps in pictorial form we use 'Flowcharts'. Today we will learn about flowcharts.

What is a Flowchart ? :- A flowchart is a pictorial representation of the steps or an algorithm. It is used to give a simple and clear solution of your programming problem. The procedure of drawing a flowchart for an algorithm is known as 'Flowcharting'. A flowchart uses different symbols to represent different types of instructions.

Different symbols and their functions :-

1.  :- This symbol is known as Start or Stop box. It is used in the beginning and ending of the flowchart.

ch-4 'Algorithm and Flowcharts'

2.  :- This symbol is called as Input / Output box. It is used to enter values or giving output of the program.
3.  :- This symbol is known as Processing box. It is used for writing the instructions and doing calculations.
4.  :- This symbol is called as Decision or condition box. It is used for checking or applying condition in the program. For eg. $A > B$, $A < B$, $A = B$ etc.
5.  :- These are flow lines. It shows the direction in which the control of the program is moving. For eg. from left to right or right to left etc.
6.  :- These symbols are known as Connectors. These are used to connect or join one part of the Flowchart to another.

children, I am giving you three minutes break. During break read all the side boxes given on page no. 47 of your text book.

ch-4 'Algorithm' and Flowchart'

Welcome back children, let us continue our next topic
'Features of a Flowchart'

1. A flowchart should have only one Start and one Stop symbol.
2. The flow lines should not intersect each other.
3. The general direction of flow should be from top to bottom or from left to right.
4. Connectors should be used if a flowchart occupies more than one page.

Advantages of a Flowchart

1. Communication :- It is easier to communicate through pictorial representation.
2. Effective Analysis :- It helps the programmer to analyze the problem.
3. Proper Documentation :- To solve the programming problems, flowcharts serve as a good program documentation.
4. Efficient Coding :- It gives a clear idea to the programmers to write a program.

ch-4 'Algorithm and Flowchart'

5. Proper Debugging :- Debugging means to remove errors. Flowchart helps us to detect, locate and remove errors.

Disadvantages of a Flowchart:- children there are few disadvantages of a flowchart, that are discussed as below :-

1. Complex Logic :- If a program logic is complex or difficult then a flowchart also becomes difficult.

2. Alteration and Modifications :- If there is any modification or updation in a flowchart, then you have to redraw or recreate a flowchart.

3. Reproduction :- Children, the flowchart symbols cannot be typed, so reproducing a flowchart becomes a big task.

children, I am ending the lesson here. Kindly try to solve part A, B, C and D given on page no. 51.