



# Vidya Bhawan Balika Vidyapith

Shakti Utthan Ashram, Lakhisarai – 811311 (Bihar)

## Chapter:- 4. PROGRAMMING AND BASICS.

CLASS- IX<sup>TH</sup>

SUB TEACHER :- VIKASH KR. RAJAK

SUBJECT:- IT

DATE :- 21/05/2020

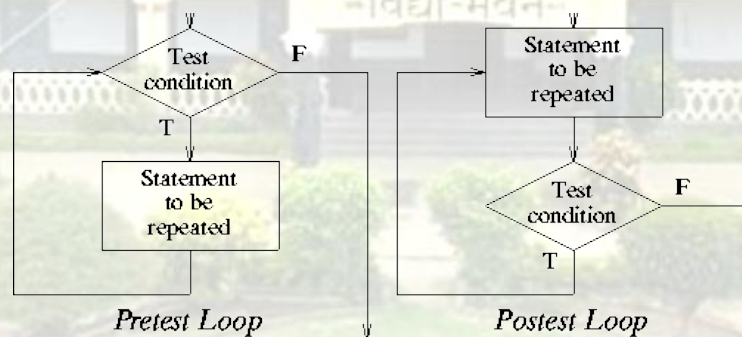
### Topic :- Loop and Flow chart.

➤ **LOOP:-** While writing a program it is necessary to repeat a part of a program for a number of times. The best solution for this is to use a loop it is a method which executes a part of the program repeatedly as specified by the programmer.

#### **TYPES OF LOOPS:-**

a) **PRE – TEST LOOP:-** It checks the looping condition at the start of the loop if the condition is true the loop execution starts otherwise stops. This loop is used in a situation when part of program is to be repeated for a fixed number of time.

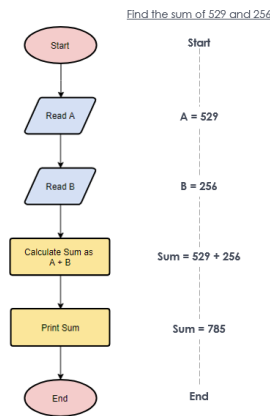
e.g., FOR ..... NEXT.



b) **POST – TEST LOOP:-** This loop checks the looping condition at the end of loop and decides whether or not to continue the execution. This loop is used when a part of the program needs to be repeated until a specified condition is met.

e.g., WHILE ..... WEND.

➤ **FLOW CHART:-** Flow chart is a symbolic representation of flow of programme. It can graphically represent data processing procedure Flow chart serves two purposes, i.e., the planning of the program structure as an aid in writing the computer program. Secondly the documentation of the program logic and work flow for the purpose of the communication with other person and to recall a program at a later time. If the program needs to be changed. The second purpose is very important because it is very difficult to check the logic of the program.



## 👉 **SYMBOLS OF FLOW CHART:-**

- **TERMINAL**:- The terminal symbol is used to indicate the beginning, ending of the program logic flow. It is the first and last symbol of the flow chart.
- **INPUT / OUTPUT BOX**:- The input/output box is used to denote any function of an input and output in the program. If there is a program instruction to input or output the data from any I/O device that step will be indicated on this symbol.
- **PROCESS BOX**:- A processing symbol is used in a flow chart to represent arithmetical and data movement instructions.
- **FLOW LINES**:- Flow lines are used to indicate the flow of operations. The exact sequence in which the instructions are to be executed. The flow of flow chart is normally from top to bottom and left to right.
- **DECISION BOX**:- The decision box is used in a flow chart to indicate a point at which a decision has to be made and to branch to one or more alternative points that is possible during execution.
- **CONNECTOR**:- A flow chart becomes complex, when the number and direction of flow lines is confusing or it spread over more than one page. It is useful to utilize the connector symbol as a substitute for flow lines.

## ✍️ **Home Work (Based on study material of 20-05-20 )**

Answer the following questions:-

1. What is Voice Recognition?
2. What is Disk Drive?
3. What is CD-Writer?
4. What is function key?