

Exercises

Answer in one word/sentence.

Q.1. Which box is used to suggest the input of data or output of information?

Ans- Input/Output box is used to suggest the input of data or output of information.

Q.2. In which construct type is the program control transferred from a certain instruction to some other instruction, depending upon the condition met?

Ans- In the Decision construct, the program control is transferred from a certain instruction to some other instruction, depending upon the condition met.

Q.3. Name all programming construct types.

Ans- Various programming constructs are as follow:-

1. Sequence construct
2. Decision construct
3. Repetition construct

Q.4. Which variable is used to keep track of the number of repetitions of a loop?

Ans- A counter is a variable which is used to keep track of the number of repetitions in a loop.

Q.5. What is the Graphical Representation of the sequence of steps required to solve a particular problem called?

Ans- A flowchart is a graphical representation of the sequence of steps required to solve a particular problem.

Give short Answers:-

Q.1. What is a flowchart? Draw and explain the symbols used in a flowchart .

Ans- A flowchart is a graphical representation of the sequence of steps required to solve a particular problem.

The different types of boxes and the purpose for which they are used in the making of a flowchart are as follow:-

1. Terminal box- This box is used at the beginning or end of the flowchart. When used at the start, START is written in it and when used at the end, STOP is written in it.
2. Input/output box- This box is used to suggest the input of data or the output of information .
3. Processing box- This box holds the instructions to do the processing act.
4. Decision box- This box is used when some comparison has to be made, and further action depends upon the result.

Q.2. Write about the Decision construct.

Ans- In the Decision construct, the program control is transferred from a certain instruction to some other instruction, depending upon the condition met.

Q.3. Write about the Repetition programming construct .

Ans- In the Repetition construct, loops are used to repeat a certain set of commands again and again, till a condition is met.

Q.4. What are counters and accumulators?

1. Counter - A counter is a variable which is used to keep track of the number of repetitions in a loop.
2. Accumulator- An accumulator is a variable used for the purpose of calculating the sum of numbers entered in a loop.

Choose the correct answer :-

1. The variable used to keep track of repetitions in a loop is called b. Counter
2. A program flow that moves from one statement to another is called c. Sequence construct
3. A flow chart is used to represent instructions b. Graphically
4. This box is used at the start/end of the flowchart a. Terminal box
5. An accumulator in a loop is used for a. Calculating the sum
6. Which box is used when some comparisons has to be made? d. Decision box
7. The process used to repeat certain sets of commands is called c. Repetition/loop
8. Which box holds the processing instructions in a flowchart? c. Processing box
9. The shape of a box in a flowchart depends on the a. Action it holds
10. Boxes in a flowchart are combined using b. Flowline

Write (T) for True and (F) for False.

1. Flow charts represent the sequence of in a written form. **False**
2. The statement $A=B+C$ will appear in the processing box of a flowchart. **True**
3. The statement $Is A < B$ will appear in the Input box of a flowchart. **False**
4. In the decision construct, the program control is transferred from a certain instruction to some other instructions, depending upon the condition met. **True**

5. A loop is used to repeat a certain set of commands again and again till a condition is met. **True** 6. An Accumulator is used to keep track of the number of repetitions done in a loop. **False** **Fill in the blanks.**
1. A flowchart is the Graphical representation of the sequence of steps required to solve a particular problem.
 2. A Terminal box is used at the beginning or end of the flowchart.
 3. A Input/Output is used to suggest the input of data or output of information.
 4. A Processing box holds instructions to do the processing act.
 5. In the Repetition construct loops are used.
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