

Chapter-7

Worksheet: Algorithms and Flowcharts

Part 1: Fill in the Blanks

Decision, Algorithm, Rounded-rectangle, Flowchart, Connector

1. A systematic list of instructions to perform a task is known as an _____.
2. A _____ is a diagrammatic representation of steps required to solve a problem.
3. The shape of the **Start/Stop** box in a flowchart is a _____.
4. The _____ box is used to test a condition or make a decision in a flowchart.
5. The _____ symbol connects different parts of a flowchart when it spans multiple pages.

Part 2: Match the Following

Match the flowchart symbols with their correct descriptions.

Column A (Symbol)

1. Start/Stop Box
2. Input/Output Box
3. Process Box
4. Decision Box
5. Connector

Column B (Description)

- a. Used to accept input or display output.
- b. Used to indicate the beginning and end of a flowchart.
- c. Used to connect different parts of a flowchart.
- d. Used to perform actions like addition or subtraction.
- e. Used to test a condition or make a decision.

Multiple Choice Questions

1. Which of the following is NOT a flowchart symbol?
 - a) Start/Stop Box
 - b) Input/Output Box
 - c) Process Box
 - d) Loop Box
2. What is the shape of a **Decision Box** in a flowchart?
 - a) Rectangle
 - b) Diamond
 - c) Parallelogram
 - d) Circle
3. Which of the following is true about flowcharts?
 - a) They are only used for mathematical problems.
 - b) They are a pictorial representation of steps to solve a problem.
 - c) They do not require any symbols.
 - d) They are not useful for programming.
4. What is the purpose of a **connector** in a flowchart?
 - a) To indicate the start and end of the flowchart.
 - b) To connect different parts of a flowchart when it spans multiple pages.
 - c) To perform arithmetic operations.
 - d) To display the output.

5. Which of the following is an example of looping?

- Printing your name once.
- Printing your name 100 times using a counter.
- Adding two numbers.
- Finding the greater of two numbers.

True or False

- An algorithm is a pictorial representation of steps to solve a problem.
(True/False)
- The **Process Box** in a flowchart is represented by a rectangle. (True/False)
- Only one flow line should enter a decision box, but multiple flow lines can leave it. (True/False)
- A flowchart does not need a logical start and stop. (True/False)
- Looping is used to repeat a set of instructions until a condition is met.
(True/False)