

Problems

- 3.1 Explain briefly the aspects of a correct loop structure.
- 3.2 What is the importance of initializing, testing, and updating the control variable of a loop.
- 3.3 Draw a flowchart and write an algorithm to read a number n and calculate and print its factorial as $n! = n * n-1 * n-2 * \dots * 2 * 1$
- 3.4 Draw a flowchart and write an algorithm to read two numbers X & Y and calculate and print X^Y , provided that X is an integer.
- 3.5 Draw a flowchart and write an algorithm to read a number and calculate and print its integer part.
- 3.6 Draw a flowchart and write an algorithm that reads a set of non zero numbers and calculates and prints the largest number. The algorithm should terminate if zero is read.
- 3.7 Modify example 3.5 to terminate if "XYZ" is read as input or the number of salesmen reaches 50.