Homework Questions Part 1

- 1. Draw a flowchart to add two numbers entered by user.
- 2. Calculate the area of a circle with given radius.
- 3. Determine and Output Whether Number N is Even or Odd.
- **4.** Determine Whether a Temperature is Below or Above the Freezing Point.
- **5.** Convert Temperature from Fahrenheit (°F) to Celsius (°C).
- Write an algorithm and draw a flowchart to convert the length in feet to centimeter.
- 7. Write an algorithm and draw a flowchart to print the square of all numbers from 1 to 10.
- 8. Write an algorithm and draw a flowchart to print the SUM of numbers from LOW to HIGH. Test with LOW=3 and HIGH=9.
- **9.** Write an algorithm and draw a flowchart to print all numbers between LOW and HIGH that are divisible by NUMBER.
- 10. Draw a flowchart to find the largest of three numbers A, B, and C.
- 11. Draw a flowchart for a program that reads 10 numbers from the user and prints out their sum, and their product.
- 12. Write an algorithm and draw a flowchart to count and print all numbers from LOW to HIGH by steps of STEP. Test with LOW=0 and HIGH=100 and STEP=5.
- 13. Write an algorithm and draw a flowchart to print the multiplication table for 6's.
- 14. Draw a flowchart for computing factorial N (N!).
- **15.** Draw a flow chart to print all natural numbers in reverse (from n to 1).
- **16.** Design an algorithm which generates even numbers between 1000 and 2000 and then prints them in the standard output. It should also print total sum.
- 17. Design an algorithm with a natural number, n, as its input which calculates the following formula and writes the result in the standard output: $S = \frac{1}{2} + \frac{1}{4} + \dots + \frac{1}{n}$.
- **18.** Design an algorithm to convert a decimal number, n, to binary format?
- **19.** Draw a flow chart to print multiplication table of any number.
- 20. Draw a flow chart to count number of digits in a number.
- 21. Draw a flow chart to find first and last digit of a number.
- 22. Draw a flow chart to swap first and last digits of a number.
- 23. Draw a flow chart to check whether a number is palindrome or not.
- **24.** Draw a flow chart to find frequency of each digit in a given integer.
- **25.** Draw a flow chart to find HCF (Highest Common Factor) of two numbers.