

## 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).
6. 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.