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 (℉) to Celsius (℃).
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 to10.
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 = ½ + ¼ + … +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.

Homework Questions Part 2

1. Write an algorithm and draw a flowchart that will read the two sides of a rectangle and calculate its area and perimeter.

2. Draw a flowchart to find all the roots of a quadratic equation $ax2+bx+c=0$.

3. Print Hello World 10 times

4. Draw a flowchart to find the sum of the first 50 natural numbers.

5. Write an algorithm and draw a flowchart to calculate $2^{4.}$

6. Draw a flow chart to find LCM of two numbers.

7. Draw a flow chart to print all Prime numbers between 1 to n.

8. Draw a flow chart to find sum of all prime numbers between 1 to n.

9. Draw a flow chart to check whether a number is Armstrong number or not.

10. Draw a flow chart to print all Armstrong numbers between 1 to n.

11. Draw a flow chart to check whether a number is Perfect number or not.

12. Draw a flow chart to print all Perfect numbers between 1 to n.

13. Draw a flow chart to check whether a number is Strong number or not.

14. Draw a flow chart to print all Strong numbers between 1 to n.

15. Draw a flow chart to check Whether a Number is Palindrome or Not

16. Draw a flow chart to find the sum of the series [$1-X^2/2!+X^4/4!-$ ....].

17. Draw a flow chart to display the n terms of harmonic series and their sum. (1 + 1/2 + 1/3 + 1/4 + 1/5 ... 1/n terms)

18. Draw a flow chart to print the Floyd's Triangle.

    1
    01
    101
    0101
    10101

19. Draw a flow chart to display the sum of the series [$1+x+x^2/2!+x^3/3!+$....].

20. Draw a flow chart to find the sum of the series [$x - x^3 + x^5 +$ ......].

21. Draw a flow chart to find the sum of the series 1 +11 + 111 + 1111 + .. n terms

22. Draw a flow chart to find the number and sum of all integer between 100 and 200 which are divisible by 9.

23. Draw a flow chart to convert a decimal number into binary without using an array.

24. Draw a flow chart to convert a binary number into a decimal number without using array, function and while loop.

25. Draw a flow chart to print Pascal triangle upto n rows.