

## 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  $ax^2+bx+c=0$ .
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  $[1 - X^2/2! + X^4/4! - \dots]$ .
17. Draw a flow chart to display the n terms of harmonic series and their sum.  $(1 + 1/2 + 1/3 + 1/4 + 1/5 \dots 1/n \text{ terms})$
18. Draw a flow chart to print the Floyd's Triangle.

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1
01
101
0101
10101
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19. Draw a flow chart to display the sum of the series  $[1 + x + x^2/2! + x^3/3! + \dots]$ .
20. Draw a flow chart to find the sum of the series  $[x - x^3 + x^5 - \dots]$ .
21. Draw a flow chart to find the sum of the series  $1 + 11 + 111 + 1111 + \dots n \text{ terms}$
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.