Assignment-0.2 (Control Structure: Branching, Looping)

1. Write a python program to analyze the given number is positive using simple if statement.

2. Write a python program to check whether the given number is positive or not using if…else statement.

3. Write a python program to analyze whether the given year is a leap year or not?

4. Write a python program to enter two numbers and find out the biggest one.

5. Write a python program to enter a 3-digits number and check whether it is palindrome no. or not?

6. Write a python program to enter marks in 3 subjects and then calculate the total mark and average. Assign the grade according to the B.Tech evaluation system.

7. Write a python program to design a menu driven program as follows and then evaluate any one of the operation according to your choice using switch case statement. Area of circle, 2. Area of rectangle, 3. Area of Triangle

8. Write a python program to design a menu driven program as follows and then display any one of the color according to your choice using switch case statement.

   R- Red

   G- Green

   B- Blue

9. Write a python program to generate the number series as follows using while loop- 1 4 9…………n

10. Write a python program to find out the factorial of the given no. using for loop.

11. Write a python program to generate the Fibonacci series up to n terms.

12. Write a python program to check whether a number n is prime number or not

13. Write a python program to check whether an input integer is perfect number or not.

14. Write a python program to reverse the number

15. Write a python program to check whether an integer number is an Armstrong number or not. If sum of cubes of each digit of the number is equal to the number itself, then the number is called an Armstrong number. For example, 153 = (1 * 1 * 1) + (5 * 5 * 5) + (3 * 3 * 3)

16. Write a python program to print the following pattern for n rows. Ex. for n=5 rows

    1

    2 1

    1 2 3

4 3 2 1

1 2 3 4 5

17. Write a python program to evaluate average of 3 numbers using function

18. Write a python program to find out the factorial of a number using function

19. Write a python program to find out HCF and LCM of the given two numbers using function

20. Write a python program to evaluate sum of the following series using recursive function 1+2+3+………………. +N

21. Write a python program to display the reverse of the given no. using recursive function

22. Write a python program to evaluate the simple interest of the given P, T, R using function, where function takes the default value for R

23. Write a python program to convert decimal into binary using recursive function

24. Write a python program to find the factorial of a number using recursive function

25. Write a python program to find the Find Sum of Series $1^2+2^2+3^2+…..+n^2$ using recursive function

26. Write a python program to develop a function that receives 5 numbers and display the sum, average and standard deviation of these numbers.