Assignment Day 1

1. Write a program to print “Hello Java” (enclosed within double quotes) on the standard output.

2. Write a Java program that calculates and prints the simple interest using the formula :
   Simple Interest = PTR / 100
   input values P,T,R should be accepted as command line input as below.
   e.g. java Simple Interest 5 10 15

3. Write a program to compute sum of digits of a given number.
   (Hint: Separate digits one by one from the number and then add)

4. Write a program that prints prime numbers between 1 to n. Number n should be accepted as command line input

5. Write a program that converts a decimal number to Roman number. Decimal Number is accepted as command line input at the time of execution.

6. WAP to to print following pattern (Pascals Triangle)

   1
   1 1
   1 2 1
   1 3 3 1
   1 4 6 4 1

7. Write a Java program that accepts the radius of a circle and displays the options as follows :
   1. find diameter of a cicle.(2* radius)
   2. find area of circle.(_ * radius * radius)
   3. find circumference of a circle.(2 * _ * radius)
   4. exit.
   Use case statement to implement each option and display the corresponding output.

8. Define a class called fruit with the following attributes :
   1. Name of the fruit.
   2. Single fruit or bunch fruit.
   3. Price.
   Define a suitable constructor and displayFruit() method that displays values of all the attributes. Write a program that creates 2 objects of fruit class and display their attributes.

9. Write a program to find the Factorial of a number using Recursion. Factorial can be defined as Factorial(n) = 1 * 2 * 3 ….* (n-1) * n.

10. WAP to print the sum of Harmonic Series:
    Input=3
    Output=1/1+1/2+1/3=1.83333333..

11. WAP to display the following output
    1
    2 4
    3 6 9
    4 8 12 16
    5 10 15 20 25

    Above pattern follows these rules:

    - Each row starts with its row number (i)
    - Each subsequent number in the row is a multiple of the row number
    - The number of elements in each row equals the row number

12. WAP to display the entered number in word.

    Input: 123
    Output: One Two Three