Date: 24.8.17 **POP Lab-Batch 1**

1.Write a program that accepts three numbers from the user and prints "increasing" if the numbers are in increasing order, "decreasing" if the numbers are in decreasing order, and "Neither increasing or decreasing order" otherwise.

Test Data

Input first number: 1524

Input second number: 2345

Input third number: 3321

Expected Output :*Increasing order*

2.Write a Java method to compute the future investment value at a given interest rate for a specified number of years.

Sample data (Monthly compounded) and Output:

Input the investment amount: 1000

Input the rate of interest: 10

Input number of years: 5

Expected Output:

Years	*FutureValue*
1	*1104.71*
2	*1220.39*
3	*1348.18*
4	*1489.35*
5	*1645.31*

3.Write a Java program to find the length of the shortest and longest consecutive elements sequence from a given unsorted array of integers.

Sample array*: [49, 1, 3, 200, 2, 4, 70, 5]*

The longest consecutive elements sequence is [1, 2, 3, 4, 5], therefore the program will return its length 5.

4.Write a java program to find the common elements between two arrays of integers.

5.Write a Java Program to calculate payroll for employee of different department using multiple objects.

6.Create a class with data members and methods to claculate the volume of cube, cuboid, cylinder, rectangular box,cone using the concept of method overloading .