Java Activity 1

**Strucured way(use static methods)**

1.Write the code in structured way

* To compute simple and compound interest
* To compute area and perimeter of a circle
* To find the given year leap year or not
* To find the factorial of a given number
* To find the given num Armstrong or not
* To find the given number factorian or not
* To find the factorial of a given number

**Object Oriented**

2.Write the above code in OO way using standards and best practices

**3.Encapsulation**

Write the code in OO way for the following question

3.1Create the class

|  |
| --- |
| Emp |
| empId  empName  sal  da  pf |
| calcNetSal()  calcDa()  calcPf() |

Encapsulate the fields and da, pf fields are not allowed to set the data by other code

Use proper constructor to initialize the data

Client can create the instance for the class EMP and bind the fields for empId, empName, sal and display

Employee details and net salary

3.2Create the class

|  |
| --- |
| Emp |
| stuId  stuName  eng  maths  sci  lang  social |
| doSum()  doAverage() |

Encapsulate the fields

Don’t use constructor to initialize data

Client can create the instance for the class Student and bind the fields and display student details , total and average

3.3 Re-implement the Question2 using Encapsulation

**4. Overloading**

4.1Provide the method to display the multiplication table of any number for

Default 10 rows

For the given rows

For the given start and end row

4.2 The class **Items** contains an array and provide the methods to display

In ascending order

The method must provide an option to display either in asc/desc order

4.3Write the class that provide static methods to

Round up to 2 decimal places

Round up to n decimal places

4.4Write the class that provide static methods to

Display the prime number up to given number

Display the prime number for the given range