

Object oriented programming using JAVA - LAB

Assignment 3

Total mark – 30

Topic: Class & Objects

Sl. No.	Question																		
1	<p>Design a class Number having num as its data member, and member functions as setNum(), displayNum(), factorial(), isPrime(), sumOfDigit(), reverseNum().</p> <p>In main function create an object of Number class and call each function sequentially as in list.</p>																		
2.	<p>Develop a java program that will deal with employee information of an organization. Define a class <i>Employee</i>. Minimum number of data member and member function are as follows:</p> <p>Data members: <i>empName, empNo, basicSal, da, hra, grossSal</i></p> <p>Methods: <i>inputEmpDetails(), calGrossSal(), showEmpDetails()</i></p> <p>You are free to add more number of relevant data member and member function. Use the method <i>inputEmpDetails()</i> to input the employee details, method <i>calGrossSal()</i> to calculate the gross salary and method <i>showEmpDetails()</i> to display the detail information of the employees in a tabular manner. Note that <i>da</i> is 20% of <i>basicSal</i> and <i>hra</i> is 10% of <i>basicSal</i>. <i>grossSal</i> is the sum of <i>basicSal, da</i> and <i>hra</i>.</p> <table><tr><th>NAME</th><th>EMPNO</th><th>BASIC</th><th>DA</th><th>HRA</th><th>GROSS</th></tr><tr><td>Ram</td><td>1</td><td>50000.0</td><td>10000.0</td><td>5000.0</td><td>65000.0</td></tr><tr><td>Shyam</td><td>2</td><td>40000.0</td><td>8000.0</td><td>4000.0</td><td>52000.0</td></tr></table>	NAME	EMPNO	BASIC	DA	HRA	GROSS	Ram	1	50000.0	10000.0	5000.0	65000.0	Shyam	2	40000.0	8000.0	4000.0	52000.0
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Ram	1	50000.0	10000.0	5000.0	65000.0														
Shyam	2	40000.0	8000.0	4000.0	52000.0														
3	<p>Develop a java program that will deal with Library information of an organization. Define a class Library. Minimum number of data member and member function are as follows:</p> <p>Data members: <i>bookName, bookNo, NoofPages, price, AuthorNames</i></p> <p>Methods: <i>addBook(), showBookInfo()</i></p> <p>Using array store N number of books and display it. N will be entered by user at runtime.</p>																		