SOME JAVA PROGRAMS FOR PRACTISE

1. Create Interface **StudentFee** and declare following method.**getFee() throws invalidFeeException.**This method ask fees from user and throwsexception if user enters invalid or negative feesCreate class **Student** with members (name, fees) and implement the **StudentFee** Interface.

2. Store name of weekdays in an array (starting from "Sunday" at 0 index). Ask day position from user and print day name. Handle array index out of bound exception and give proper message if user enter day index outside range (0-6).

3. Create a class Voter(voterId, name, age) with parameterized constructor. The parameterized constructor should throw a checked exception if age is less than 18. The message of exception is "invalid age for voter "

4. Create Interface Taxable with members salesTax=7% and incomeTax=10.5%. create abstract method calcTax(). a. Create class Employee(empId,name,salary) and implement Taxable to calculate incomeTax on yearly salary. b. Create class Product(pid,price,quantity) and implement Taxable to calculate salesTax on unit price of product. c. Create class for main method(Say XYZ), accept employee information and a product information from user and print income tax and sales tax respectively.

5. Create three classes

Faculty (facultyid, salary) FullTimeFaculty (basic, allowance) inherits class Faculty PartTimeFaculty (hour, rate) inherits class Faculty

Create a method for accepting input in FullTimeFaculty and   PartTimeFaculty, but salary should not be accepted. Salary is   calculated on the basis of (basic+allowance) for FullTimeFaculty and   (hour*rate)forPartTimeFaculty.Alsocreatemethodinaboveclassesto   display faculty data. Createanotherclass(sayXYZ)formainmethodandstore2fulltime   and 2 parttime faculty information. Also print their details.

6. Create class OneBHK with instance variable roomArea , hallArea and price a. Create default and parameterized constructor; b. Method show(): to print OneBHK data member information;

Create another class TwoBHK which has all the properties and behaviour of OneBHK and a new instance variable room2Area.

   a. Create default and parameterized constructor; b. Method show(): to print all data member information.

7. Create class Product (pid, price, quantity) with parameterized constructor.Create a main function in different class (say XYZ) and perform following task: a. Accept five product information from user and store in an array b. Find Pid of product with highest price. c. Create method (with array of product's object as argument) in XYZ class to calculate and return total amount spent on all products. (amount spent on single product=price of product * quantity of product)