1. Create a Class Employee that holds id,name,basic as the attributes. Write a method to print the details of Employee and a method check that takes Employee array object as parameter and gives the name of the employee who draws more.

Define constructors as required.

Test the above in a main method

2 Create a class Customer with name,dateofpurchase,billAmount as the attributes.

Define constructors to assign values.

Create a class Bill that has a logic to generate the bill of a particular customer.(hint: takes Customer reference as parameter)

Test with a main method.

public class Bill{

public static void genBill(Customer c1)

{

}

}

Note: A static method is a method that is not associated with any object. Can be called with the class name.

3.

Create a class Point that stores xco,yco as the attributes.

Write constructors to initialize the values to xco and yco.

Define a static method that prints the distance between the two points that are taken as parameters.

public static int distance(Point p1,Point p2)

{

// code

}

3

Bank case Study.

A Customer goes to a bank to open an account.He fills in his personal details like name,address,email,telephoneno,mobileno and submits.A confirmation is given , by generating a customer code.

Later on bank creates a new account with the available customer details and adds this to its database,and various services like deposit,withdrawal,CreateStatement etc are are provided.

1. Design classes for the application and show their relationships in a class diagram.
2. Create classes and add functionalities to the Bank
3. boolean createNewAccount(Account newAccount);
4. boolean Deposit(int accountno,double amount);
5. boolean withdraw(int accountno,double amount);
6. boolean createStatement(int accountno);
7. Test the above application with a Client program.

Validations:

1. account number and customerid has to be auto generated.
2. Withdraw can be made only if balance is 1000rs and above.
3. Define contstructors,getters and setters as required.

**Additional case studies for practice:**

1 Create a class Book with bookId,title,author as fields.

define a default constructor and a parameterized constructor

to assign the required values.

define setters/getters.

Create a class Store that stores a collection of Books.

Add methods in the Store Class to perform the following:

A Add a new Book to the list.

B Delete a book from the list.

C Display all books;

D Display a particular book

E Update a Book.(only title and author can be changed)

test the above by writing a main method.

2 An application for Online used cars selling portal has to be created.where in a customer first signsup with (name,address,email,telephone etc) details.He is registered with a customerid and password.Customer can bid for a car by entering his customerid /password.Once the bidding time is over,the car is sold to the customer who bids the least.

Design the classes, with appropriate attributes and methods.and show the relationship