

University Of Central Punjab



Object Oriented Paradigm (Lab 5)

Task 1:

You have a class circle having instance variable radius (in float), default constructor, a constructor having one parameter and behaviors (Area and circumference) with return type as float.

You should implement a copy constructor to perform declaration time initialization

Task 2:

Write the C++ code for a class 'BankAccount' that represents a real-life model of a bank account. A customer having account in bank have several attributes. A bank assigns him/her a unique id (customer id), for first customer it is 1 , for second it is 2 so on. Customer can also ask bank that how much total number of customers it has.

When an object of this class is instantiated, it is always done by either using an overloaded constructor having 5 parameters or by creating a copy of an already existing object. Examples of such instantiations are given below:

```
BankAccount obj("Name", "Address", "Ph:0300-123", "Current", 1000);  
BankAccount obj2 = obj1; //copies the contents of obj1 in obj2
```

All character arrays are to be dynamically declared and the size of all the arrays should be 15. A bank account number can have 4 or more digits. This number will be unique for every account Also make sure that there is no memory leakage or run time errors.