Object Oriented Programming

Marks 10

Instructions

Work on this home work individually. Absolutely NO collaboration is allowed. Any traces of plagiarism would result in a ZERO marks in this homework and possible disciplinary action. Tasks should be coded in **C++**.

Due Date

Paste the solution(s) folder of the problems (source code .cpp files only) labeled with your complete roll number in SEM – HW 04 and SEA – HW 04 folders for SE Morning and SE Afternoon sections respectively on Thursday, March 24, 2016 before 05:00 PM. These folders are available at \\printsrv\Teacher Data\Umair Babar\Students.

ADT: Employee

Write a class named **Employee** for which each object can hold information about a particular employee:

1. The class should have following **four private data members**

    1. A **string** named **name** that holds the **employee's name**.
    2. An **integer** named **id** that holds the **employee's ID number**.
    3. A string named **department** that holds the **name of the department** where the employee works.
    4. A string named **position** that holds the **employee's job title**.

2. Provide the implementation of following **constructors** and a **destructor**

    1. A **constructor** that accepts **employee's name**, **employee's ID number**, **department**, and **position** as arguments and assigns them to the appropriate member variables.

    2. A **constructor** that accepts **employee's name and ID number** as arguments and assigns them to the appropriate member variables. The **department and position** fields should be assigned an **empty string ("")**.

    3. A **default constructor** that assigns **empty string ("")** to the **name, department, and position member variables**, and **0** to the **id** member variable.

    4. A **copy constructor** to initialize an employee's object with already existing object.

    5. A **destructor** that do nothing except displaying a simple message "Destructor executed…" on the screen.

3. Provide the implementation of **properties methods (get/set)** for all the data members (name, id, department and position) of the class.

4. Provide the implementation of following member functions

    1. **setInfo** method accepts **employee's name**, **employee's ID number**, **department**, and **position** as arguments and assigns them to the appropriate member variables.

    2. **getInfo** method to **initialize the data** of an employee **taken** from the user.

    3. **putInfo** method to display the **information** of a particular employee.

5. Once you have written the class, write **main** function and test its functionality also creates **five Employee objects** to hold the following data.

Name	Id Number	Department	Position
Ejaz Ashraf	1230	PUCIT – Old Campus	Assistant Professor
Muhammad Farooq	1231	PUCIT – Old Campus	Lecturer
Madiha Khalid	1241	PUCIT – New Campus	Lecturer
Arifa Mirza	1242	PUCIT – New Campus	Lecturer

The program should store this data in the five objects and then display the data for each employee on the screen in the appropriate format.

NOTE: - No submission will be accepted after the due date and time.

BEST OF LUCK