

Object Oriented Programing Lab

BSCS(Fall 2015)

Lab # 5

Friday , march 25, 2016

Instructions: For support and guidance you can CONTACT ME AND TA's. **Discussion with peers is strictly prohibited.**

Note:

Read following topics for **30 minutes**, then close book and start your lab.

“Tonny gaddis”

(Static member variable, Static member function, Friends)

Task#1: (Static member variable)

Write a **Budget** class that is used to gather the budget requests (division budget) for all the divisions of a company. (Number of divisions should be 4). The class uses a **static member, corpBudget** , to hold the amount of the overall corporate budget. When the member function **addBudget** is called, its argument is added to the current contents of **corpBudget** and **divisionBudget** . By the time the program is finished, **corpBudget** will contain the total of all the values placed there by all the Budget class objects and **divisionBudget** will contain budget of each division (Object).

Task #2: (Static member function)

Modify **Budget** class to include a **static member function** named **mainOffice**. This function adds its argument to the **static corpBudget variable** and is called before any instances of the Budget class are defined.

Task #3: (Friends)

Modify Budget class to include the **addBudget** function of another class(**AuxiliaryOffice**) **which** has been declared a friend. Let's assume class, **AuxiliaryOffice** , represents a division's auxiliary office, perhaps in another country. The auxiliary office makes a separate budget request, which must be added to the overall corporate budget.

Final Main() function should perform following functionalities:

- Get the main office's budget request from user and set them.
- Get the budget requests for each division from user and set them.
- Get the request for the auxiliary office from user and set them.
- Display all three above values for each division.