

Program 5f
COP-2250 - Java Programming
Professor : Michael Robinson
e-mail : mrobi002@cs.fiu.edu
Web Page : www.cs.fiu.edu/~mrobi002/teaching

- Turn in the signed source code on paper, and email me the source code.
- Make sure the program is properly documented and aligned uniformly, looking professionally,

I will take points off if it is not.

- Include the following header in every program:

```
/*  
*****  
Author : Your Name  
Course : COP 2250 Days and time  
Professor : Michael Robinson  
Program # : Program Purpose/Description  
           {A brief description of the program }  
Due Date : MM/DD/YYYY
```

Certification:

I hereby certify that this work is my own and none of it is the work of any other person.

.....{ your signature }.....

```
*****/
```

Purpose of this program:

- Implement classes and constructors
using most of the material learned during this semester

**** NOTE ****

- Each task must be done inside its own method.
- Use main ONLY to create variables and call the methods.

1 - Worth 3 points (Implement Constructor - no main method)

- Create a class with constructors and name it :
first letter of your last name +
first letter of your first name +
the word Class. ex: rmConst

This class must have:

- Private variables
- Three constructors that will accept:
constructor one = nothing
constructor two = an array of the grades you obtained so far in this class
constructor three = the following three integers 66 40 2
- EACH constructor MUST have mutator/setter method that will be used to
receive other variables from the calling program and set your private variables.
- EACH constructor MUST have accessor/getter method that will be used to
return values requested by the calling program.

2 - Worth 2 points (Implement external classes - no main method)

- Create a class and name it:
first letter of your last name +
first letter of your first name +
the word Class. ex: rmClass
- Create a method that will RETURN a String containing your name
- Create a method that will RETURN a String containing your major
- Create a method that will RETURN a String containing your credits taken
- Create a method that will RETURN a String containing your credits needed
- Create a method that will RETURN a String containing current GPA

3 - Worth 3 points (Implement calling program with main method in it)

- Create a main program called : your last name + First name initial + pgm5.
- At the main(String arg[]) method in main program:

- Call one method for each constructor of program 1.
Each method will :
 - Create object/instance of a class for its constructor
 - Method for object one will display "Hello my name is FirstName LastName"
 - Method for object two will accept all your grades and add them.
 - Method for object three will send the ints 66 44 2 to be SWAPPED
- Using the get/accessor methods display what each constructor has.
getter method for object two will return the total amount of points in you grades
getter method for object three need to SWAP the the ints and put the in order.
- Using the mutator/set methods modify the data for each constructor as follows:
 - setter one will accept "I am learning Java at FIU"
 - setter two will accept all your dream grades
 - setter three will accept the ints 333 155 32
- Again using the get/accessor methods display what each constructor has.

- From the main method
Call the methods in the external class.

Note: you need to turn in three programs, your Constructor program, the External Class program and the program that uses the Constructor and the External Class.

Extra Credit - worth 2 points

- 4 - Use GUI messageDialog Boxes and inputDialogBoxes for all communications with the user.