Professor: Michael Robinson
e-mail : michael.robinson@fiu.edu
Web Page : www.cs.fiu.edu/~mrobi002/teaching

- Program must be named: yourLastNameFirstLetterOfYourFirstNamepgm1.java
- Turn in the signed source code on paper, and email me the source code.
- Make sure the program is properly documented and aligned uniformally, looking professionally, I will take points off if it 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 project:

- Using Eclipse create first project, first class, and first java program
- Use multiple variables of Primitive Data Types and the String Class by declaring them, and assigning values to them in the main method.
- Create some methods that accept, and others do not accept parameters.
(MAKE SURE THE METHODS NAMES DESCRIBE WHAT THEY DO example: addNumbers )
- Inside the methods do calculations when needed and print results.
- Use print, println, and printf.
- Use \n and \t
- Use remarks to document your program.
- Use for loops


## How:

1 - Worth 2 points

- In the main method, using the proper Primitive Data Types, - Create the following variables with the following values:

| Data Type | Variable Name | Variable Contents |
| :---: | :--- | :--- |
| $? ? ?$ | myName | $=$ place your name here |
| $? ? ?$ | creditsTaken | $=$ place your credits taken this semester |
| $? ? ?$ | totalCredits | $=$ place your total amount of credits taken |
| $? ? ?$ | GPA | $=$ place your current GPA |
| $? ? ?$ | major | $=$ place your major |
| $? ? ?$ | className | $=$ place the name of this class |

- Call a method named myInfo PASSING the previous variables
- Create the following variable with the following value:

| Data Type | Variable Name $=100$ |
| :---: | :--- |
| ??? | maxValue |

- Call the following methods PASSING the maxValue variable
- addNumbers
- substractNumbers
- multiplyNumbers
- divideNumbers
- modNumbers

2 - Worth 1 point

- Create the following methods ACCEPTING their corresponding data variables
- myInfo
- addNumbers
- substractNumbers
- multiplyNumbers
- divideNumbers
- modNumbers

3 - Worth 3 points

- In the myInfo method, using the System. out.printf and $\backslash n$ commands print the information send from the main method and received by this method e.i.

Hi my name is ..,
my major is ...,
I have completed .. credits, I am taking .. credits, This class's name is ..

- In the addNumbers method, using the System.out.print and \n commands print the following computations: ( make sure your program does the computations )

$$
\begin{aligned}
& \operatorname{maxValue}+1=? ? \\
& \text { maxValue }+2=? ? \\
& \text { maxValue }+3=? ? \\
& \text { maxValue }+4=? ? \\
& \text { maxValue }+5=? ?
\end{aligned}
$$

- In the substractNumbers method, using the System.out.print and \t commands print the following computations: ( make sure your program does the computations )

$$
\begin{aligned}
& \text { maxValue }-1=? ? \\
& \text { maxValue }-2=? ? \\
& \text { maxValue }-3=? ? \\
& \text { maxValue }-4=? ? \\
& \text { maxValue }-5=? ?
\end{aligned}
$$

- In the multiplyNumbers method, using the System.out.println command print the following computations: ( make sure your program does the computations )

$$
\begin{aligned}
& \operatorname{maxValue} * 1=? ? \\
& \text { maxValue } * 2=? ? \\
& \text { maxValue } * 3=? ? \\
& \text { maxValue } * 4=? ? \\
& \operatorname{maxValue} * 5=? ?
\end{aligned}
$$

- In the divideNumbers method, using the System.out.printf command ONLY print the following computations: ( make sure your program does the computations )
maxValue / $1=$ ? ?
maxValue / $2=$ ??
maxValue / $3=$ ??
maxValue / $4=$ ??
maxValue / $5=$ ? ?
- In the modNumbers method, using the System.out.print command ONLY print the following computations: ( make sure your program does the computations )

> maxValue $\% 1=? ?$
> maxValue $\% 2=? ?$
> maxValue $\% 3=? ?$
> maxValue $\% 4=? ?$
> maxValue $\% 5=? ?$

4 - Worth 2 points

- From the main method call a method named sum0fDigits(), without passing any parameters
- Create a method named sum0fDigits()
- In the sumOfDigits() method declare the variable $N$ of type int
- Assign the value 100 to the variable N.
- Using the sum of digits formula: (1 + N)*(N/2)
print the total amount of the sum of digits from 1 to 100

The formula $(1+N) *(N / 2)$ will calculate
the sum of all the numbers from 1 to $100(1+2+3+4+\ldots .+100)$,
The formula is: (1 plus $N$ ) times ( N divided by 2).
5 - Worth 2 points

- From the main method call a method named forLoop(), without passing any parameters
- Create a method named forLoop()
- In the forLoop() method declare the variable total of type int
- Using a for loop to the variable total, add the sum of all numbers from 1 to 100
- Use the System.out.printf and \n commands to print the variable total

