AIM Code School

Java Specialization Course

Week 1 Day 1 Assignments Overview:

Our first programming assignments are going to be basic in terms of structure but also we want to make them possibly mathematically difficult as to get us in the mindset of being Java Programmers. These assignments aren't "GRADED" in the strictest of terms, but more of coding challenges that you can do to see if you understand the topics and give you practice in Java.

Instructions:

Each coding lab will be its own file. In the top of your programs, add a comment stating your name, the class that its for, lab number, and a brief description of what the program does. Once you have completed, compiled, and tested your code and are satisfied with the results, upload your files in its own folder in Github. Email me or send a message via discord with a message stating that it is completed.

Lab1A:

// create an int data type

//create an int data type

//print out your two ints to the console

//add your two ints

//subtract your two ints

//multiple your two ints

//divide your two ints

//create a double data type

//create another double data type

//print your two double data types

//add your two doubles

//subtract your two doubles

//multiple your two doubles

//divide your two doubles

//create a float data type

//cast a double as a float

//print your two float data types

//add your two floats

//subtract your two floats

//multiple your two floats

//divide your two floats

//Using the String class assign your name to a string Object

//print your name in the console

//print out in the console the following string "Hello my name is " and output your name by concatenating your strings

Lab1B:

```
(Display a pattern) Write a program that displays the following
pattern:
          J     A    V     V    A

          J    A A    V   V    A A

       J   J   AAAAA    V V    AAAAA

        J J   A     A    V    A     A
```

Lab1C:

```
/*
(Area and perimeter of a circle) Write a program that displays the area and
perimeter of a circle that has a radius of 5.5 using the following formula:
perimeter = 2 * radius * pi
area = radius * radius * pi
NOTE: you can use 3.14 in replacement of pi, or read up on the MATH package
specific to PI
*/
```

Lab1D:

```
/*
(Average speed in miles) Assume a runner runs 16 kilometers in 65 minutes
and 27 seconds.

Write a program that displays the average speed in miles per hour.
(Note that 1 miles is 1.6 kilometers.)
*/
```