



## Intro to Java Week 1 Coding Assignment

**Points possible:** 70

Category	Criteria	% of Grade
Functionality	Does the code work?	25
Organization	Is the code clean and organized? Proper use of white space, syntax, and consistency are utilized. Names and comments are concise and clear.	25
Creativity	Student solved the problems presented in the assignment using creativity and out of the box thinking.	25
Completeness	All requirements of the assignment are complete.	25

**Instructions:** In Eclipse, or an IDE of your choice, write the code that accomplishes the objectives listed below. Ensure that the code compiles and runs as directed. Take screenshots of the code and of the running program (make sure to get screenshots of all required functionality) and paste them in this document where instructed below. Create a new repository on GitHub for this week's assignments and push this document, with your Java project code, to the repository. Add the URL for this week's repository to this document where instructed and submit this document to your instructor when complete.

### Coding Steps:

1. Create a new Java project in Eclipse (make sure the JRE is set to 1.8).
2. Create a new class in the project and name it App. Make sure the box is checked for the option that reads "public static void main(String[] args)".
3. Inside the main method, create **two** variables for the following real-life examples and assign them values (choose the best data type for the values):
  - a. Item price
  - b. Amount of money in wallet
  - c. Number of friends
  - d. Age in years (as a whole number)
  - e. First name
  - f. Last name
  - g. Middle initial
4. Create the following variables by performing operations (addition, subtraction, concatenation) on the variables created in the previous step:



# PROMINEO TECH

- a. New amount of money in wallet after buying the item
  - b. Number of friends you've made each year based on your age variable and your number of friends variable
  - c. Full name based on first name, middle initial, and last name
5. Use `System.out.println()` to print out the values of all the variables you've created. Provide some detail as to what the value being printed is. For example, if I had a variable called favorite state, I would do the following:

```
String favoriteState = "AZ";
```

```
System.out.println("My favorite state is: " + favoriteState);
```

**Screenshots of Code:**



# PROMINEO TECH

```
1 public class App {
2
3     public static void main(String[] args) {
4         // TODO Auto-generated method stub
5         //Week 1 Coding Assignment
6         //Creating two variables and assigning values to each
7
8         double itemPrice1 = 100;
9         double itemPrice2 = 45.50;
10
11         float amountOfMoney1 = 200;
12         float amountOfMoney2 = 400;
13
14         int numberOfFriends1 = 100;
15         int numberOfFriends2 = 75;
16
17         double ageInYears1 = 20;
18         double ageInYears2 = 30;
19
20         String firstName1 = "Spongebob";
21         String firstName2 = "Patrick";
22
23         String lastName1 = "Squarepants";
24         String lastName2 = "Starr";
25
26         char middleInitial1 = 'A';
27         char middleInitial2 = 'B';
28
29         //Now creating variables using operations and concatenation
30         //New amount of money in wallet after buying item
31         //I have to subtract the values in the amountOfMoney identifiers to itemPrice identifiers
32         //to get the total new amount of money
33
34         double newAmountOfMoney1 = amountOfMoney1 - itemPrice1;
35         double newAmountOfMoney2 = amountOfMoney2 - itemPrice2;
36
37         //Number of friends made each year based on age variable and number of friends variable
38
39         //I will divide the number of friends to the number of age to get the number of
40         //how many friends have been made each year since birth
41
42         double numberOfFriendsMade1 = numberOfFriends1 / ageInYears1;
43         double numberOfFriendsMade2 = numberOfFriends2 / ageInYears2;
44
45         //Full name using concatenation and adding space in between the names
46         String fullName1 = firstName1 + " " + middleInitial1 + " " + lastName1;
47         String fullName2 = firstName2 + " " + middleInitial2 + " " + lastName2;
48
49         //Using System.out.println() to print console
50         System.out.println("The money I have left after shopping is $" + newAmountOfMoney1);
51         System.out.println("Compared to the money my friend has, which is $" + newAmountOfMoney2 + ".");
52         System.out.println("But at least I have made " + numberOfFriendsMade1 + " " + "friends each year since birth,");
53         System.out.println("While he has only made " + numberOfFriendsMade2 + " " + "friends each year.");
54         System.out.println("By the way, my name is " + fullName1 + ".");
55         System.out.println("My friend's name is " + fullName2 + ".");
56     }
57 }
58
59 }
60 }
```

## Screenshots of Running Application:



# PROMINEO TECH

The screenshot shows the Eclipse IDE interface. The title bar reads "eclipse-workspace - MyFirstProject/src/App.java - Eclipse IDE". The menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. The toolbar contains various icons for file operations and development tools. The console window is active, displaying the following output:

```
<terminated> App [Java Application] C:\Users\Candice\p2\pool\plugins\org.eclipse.justi.openjdk hotspot.jre.full.win32.x86_64_15.0.2.v20210201-0955\jre\bin\javaw.exe (May 29, 2021, 1:28:35 PM - 1:28:36 PM)
#
The money I have left after shopping is $100.0
Compared to the money my friend has, which is $354.5.
But at least I have made 5.0 friends each year since birth,
While he has only made 2.5 friends each year.
By the way, my name is Spongebob A Squarepants.
My friend's name is Patrick B Starr.
```

The Windows taskbar at the bottom shows the search bar, task view button, and several application icons. The system tray on the right indicates a temperature of 97°F, the time as 1:34 PM, and the date as 5/29/2021.

**URL to GitHub Repository:**

**<https://github.com/candicehendo/Week-1->**