

CMPT220 - Program 1

Due: Monday, Feb 3<sup>rd</sup>, before 9:00 a.m. (Submitted via iLearn and printed)

On my desk (in the classroom) beginning of class

Name the project **Prog1YourLastName**

Name the class **ChangeMakerYourLastName**

The main purpose of this assignment is to introduce you to the Java/Eclipse environment.

We have reviewed the ChangeMaker program introduced in class. Your assignment is to modify it and make it run.

- We want to add **one, five, ten and twenty dollar bills** to the program.
  - What new variables will you need?
  - What should you name them?
  - Where should you declare them?
  - How will you calculate their values?
  - Which value should you calculate **first**? Why?
  - Remember that a dollar is 100 cents!!! (What “value” would a five dollar bill have?)
  - Where should you print the output associated with the bills?
- Remove the words “from 1 to 99” from the first line of output.
- Add “bills and ” to the second line of output.
- Remove “in coins” from the 4<sup>th</sup> line of output.
- **In addition**, compute and print out the **total number of bills** and **total number of coins** used to make change. (More new variables! YAY! ☺ )
- Notice how sometimes the English is incorrect – 1 pennies???? Fix that, too!
- Be sure that you follow the documentation guidelines.

I fully expect everyone to make a 100 on this assignment!!!! Follow the directions carefully!

Name the **project** Prog1YourLastName.

Name the **class** ChangeMakerYourLastName.

Add comments as described in the documentation guidelines.

Remember to comment every closed-brace.

Remember to initialize every variable that holds a numeric value.

Be sure to test your program on a wide variety of input (so that you can make sure all of your calculations are correct).