Name _____   Date: ___/___/____

Mr. Merlis – Java 2   Day of Class: _____

Lab #1: The Coin Game

LET'S GET STARTED:

Go to **My Computer** and navigate to: S:\Public\merlisCSI\2008_2009
There is a folder there called "java2". Highlight and COPY it. Then PASTE IT into your H:

Lab 1 - A coin game - Planning and P-code

Open BlueJ, find the Java 2 folder, and open up the "Coin" project.
You will notice there is a class already there called "Coin".

→ **Examine that class and get an understanding of what it can do.**

Create a new class "CoinGame"

We will develop p-code for the game in class. This is how the game is played.

It is a two player game. Each player has a penny, nickel and dime. There are 10 rounds in a game. Each player flips their coins. If a coin is a heads, the player gets the value of the coin. If it is a tails the player gets nothing. After ten rounds, the one with the highest total wins and the loser pays the winner that total.

Output for the program might look like this

```
Round        me            my total        you            your total
  1          TTH           10              HTH            11
  2          HHT           16              THH            26
  3          TTT           16              HHH            42
  .
  .
  .
 10          HHT           67              HTT            85
```

I lose and have to pay you 85 cents.

(Other possible outcomes)
You lose and have to pay me 91 cents
We tied.

Create the coins and initialize the totals in the constructor of CoinGame. Put the logic in the public void play() method.

Create another class, CoinGameTest, that will declare and instantiate a new CoinGame and play.

Extra Credit

Loop the number of time that the game is played
In CoinGame keep track how many times each player wins
In CoinGame keep track of the total winnings for each player
Write a method public void printFinalResults() in the CoinGame class that will show these stats
Call the new method outside the loop in CoinGameTest