ReflectionLogs -AddCoins[Mastery]

```java
Program: AddCoins.java          Date: October 30, 2024

package Mastery;

import java.text.DecimalFormat;
import java.util.Scanner;

public class AddCoins { }
```

So far I have just created the AddCoins method and added the necessary components to collect user data, and format the number as I want which will be used later since money doesn't go past 2 decimal places.

```java
public static void main(String[] args) {

    //Preparing for user input
    Scanner input = new Scanner(System.in);

    //Declaration
    int quarters, dimes, nickels, pennies;

    System.out.println("This application will tell you how much money you have!"); //Tell user about program

    System.out.println("Enter your total coins:"); //Prompt user for coins

    System.out.print("Quarters: ");
    quarters = input.nextInt();

    System.out.print("Dimes: ");
    dimes = input.nextInt();

    System.out.print("Nickels: ");
    nickels = input.nextInt();

    System.out.print("Pennies: ");
    pennies = input.nextInt();

    getDollarAmount(quarters, dimes, nickels, pennies); //Go to getDollarAmount Method
```

Below the original picture, I have declared the variable types, and prompted the user to enter their amount of coins. After the computer compiles that data, it goes to the getDollarAmount method which I added parameters to so I can access the code from the main method.

```java
package Mastery;

import java.text.DecimalFormat;
import java.util.Scanner;

public class AddCoins {


    public static void getDollarAmount(double quarters, double dimes, double nickels, double pennies) {

        DecimalFormat deca = new DecimalFormat ("#.##");
```

Going back to the getDollarAmount method, I added parameters and made their types a double allowing for the correct calculations later. I also included the deca variable from the imported decimalformat so I can format my number like money is properly formatted.

```java
public static void getDollarAmount(double quarters, double dimes, double nickels, double pennies) {

    DecimalFormat deca = new DecimalFormat ("#.##");

    quarters *= 0.25;
    dimes *= 0.10;
    nickels *= 0.05;
    pennies *= 0.01;

    double amount = quarters + dimes + nickels + pennies; //Calculate amount total

    System.out.print("Your total is $" + deca.format(amount) );
```

I finished the code by first taking the coins the user has, and multiplying by the correct amount each coin is worth (e.g. if they have 3 quarters, they multiply 3 by 0.25, to get the amount the 3 quarters are worth). I did that for each coin and just added them together to calculate the total amount of money.