My savings reflection log

First I declared all my variables which was my Initial balance, then I set up a users bank by an object, afterwards I started my while loop which will keep on coming back until the user inputs a 0. This is so that the application can keep running until the user decides to quit. And then I ask the user for their input while displaying all of their choices. I then used a switch case for every different choice these choices are linked through methods so that in my object all the work is being done.

```
Scanner input = new Scanner(System.in);
                    //Prompt user for inital bank balance;
                                        System.out.println("Enter your initial Balance in dollars: ");
//declaration for intial balance
                                        double iB = input.nextDouble();


                                        //Set up user's bank balance by using object
                                        piggybank userbank = new piggybank(iB);

                                        //Start While loop to keep coming back to options until user inputs 0
                                                int choice = 10;
                                                while(choice !=0)
                                                {
                                                        //Ask user and present their choices
                                                        System.out.println("1. Enter Total in Bank.");
                                                        System.out.println("2. Add a Penny.");
                                                        System.out.println("3 Add a Nickel.");
                                                        System.out.println("4. Add a Dime..");
                                                        System.out.println("5. Add a Quarter.");
                                                        System.out.println("6. Take out money.");
                                                        System.out.println("Enter 0 to QUIT");
                                                        System.out.println("Enter your choice: ");
                                                        choice = input.nextInt();

                                                        switch (choice)
                                                        {

                                                        case 0:
                                                                System.out.println("Quitting the program.");

                                                        case 1 :
                                                                System.out.println(userbank.toString());
                                                                break;

                                                        case 2 :
                                                                System.out.println(userbank.AddP());
                                                                break;
```

```
                                        case 3 :
                                                System.out.println(userbank.AddN());
                                                break;

                                        case 4 :
                                                System.out.println(userbank.AddD());
                                                break;

                                        case 5 :
                                                System.out.println(userbank.AddQ());
                                                break;

                                        case 6 :

                                                System.out.println("Choose the amount you want to take out: ");
                                                 double M_out = input.nextDouble();

                                                System.out.println(userbank.takeM(M_out));
                                                input.close();

                                }

                        }
                                System.out.println("Thank you for using this Program.");
                }
                }
```

I created a public class called piggybank since I have this object in the mainmethod, then I created a private static double which only allows for the program to access these values in this specific class, I declared all my values based on the requirements. I then defined the total of the bank balance value. Using a numformat for money it will do that for me, I also used a decimal format which will allow for only 2 decimal places in my answers. In my constructor method I have methods for every choice that the user has.

```
public class piggybank {
//linking which values belong to piggy bank
        private static double
        P = 0.01, N= 0.05, D = 0.10, Q = 0.25;

        //defining the total of the bank balance value
        private double BB;
        //money formating
        NumberFormat money = NumberFormat.getCurrencyInstance();
        //using a decimal format to keep the correct amount of decimal places
        DecimalFormat deca = new DecimalFormat("#.##");
```

```
//constructor method
public piggybank(double iB)
{
        BB= 0;
}
public double getB()
{
        return BB;
}
public String toString()
{
        String  BB_String;
        BB_String = ("Your bank balance is: " + BB);
        return BB_String;
}
public double AddP()
{
        return P;
}
public double AddN()
{
        return N;
}
public double AddQ()
{
        return Q;
}
public double AddD()
{
        return D;
}
public char[] takeM(double m_out) {
        // TODO Auto-generated method stub
        return null;
}
```