HW1Code – Ruth Steinberg

1. **AddTwo.java:**

```
public class AddTwo {

   public static void main(String[] args) {

      // get 2 numbers from the command-line and define them as a variable of type int

      int num1 = Integer.parseInt(args[0]);

      int num2 = Integer.parseInt(args[1]);

      // define a new variable "sum" that represents the sum of num1 and num2

      int sum = num1+num2;

      // print

      System.err.println(num1 + " + " + num2 + " = " + sum);

   }

}
```

2. **Coins.java:**

```
public class Coins {

   public static void main(String[] args) {

      // get amount of cents from the command-line and define her as a variable of type int

      int sumCents = Integer.parseInt(args[0]);

      // calculate the amount of quarters and define the amount as a variable of type int

      int quarters = sumCents / 25;

      // calculate the remaining cents

      int cents = sumCents - (quarters*25);

      // print

      System.err.println("Use " + quarters + " quarters and " + cents + " cents");

   }

}
```

3. **LinearEq.java:**

```
public class LinearEq {
   public static void main(String[] args){
      // get 3 numbers from the command-line and define them as a variable of
type double
      double a = Double.parseDouble(args[0]);
      double b = Double.parseDouble(args[1]);
      double c = Double.parseDouble(args[2]);
      // calculate x - a*x+b=x
      double x = (c-b)/a;
      // print
      System.out.println("x = " + x);
   }
}
```

4. **Triangle.java:**

```
public class Triangle {
   public static void main(String[] args) {
      // get 3 numbers from the command-line and define them as a variable of type int
      int a = Integer.parseInt(args[0]);
      int b = Integer.parseInt(args[1]);
      int c = Integer.parseInt(args[2]);
      // define a boolean variable that represent the answaer (if the 3 numbers can form triangle)
      boolean answer = false;
      // check if any two sides is greater than the length of the remaining side
      if(((a+b)>=c)&&((b+c)>=a)&&((a+c)>=b))
        {
                  answer = true;
        }
      // print the 3 numbers and the answer
      System.out.println(a + " , " + b + " , " + c + ": " + answer);
   }
}
```

5. **Gen3:**

```
import java.util.Random;

public class Gen3 {
   public static void main(String[] args) {
      // create 2 new objects from type Random
      Random randomNum1 = new Random();
      Random randomNum2 = new Random();
      Random randomNum3 = new Random();
      // get 2 numbers from the command-line that represents the min and the
max of the     range
      int start = Integer.parseInt(args[0]);
      int end = Integer.parseInt(args[1]);
      // create 3 varieble from type int, that any varieble is random number
between arg[0] and arg[1]
      int a = randomNum1.nextInt(start, end);
      int b = randomNum2.nextInt(start, end);
      int c = randomNum3.nextInt(start, end);
      // create new varieble that represents the smallest number from a, b, c.
      // first - the min is the smallest number from only a and b
      int min = Math.min(a, b);
      // check if c is smallest than min
      if(Math.min(a, b)>c)
      {
         min = c; // if c is smallest than min, c is the final min.
      }
      // print
      System.out.println(a);
      System.out.println(b);
      System.out.println(c);
      System.out.println("The minimul generated number was: " + min);
   }
}
```