HomeWork 1 Code Dvir Bendavid

1. AddTwo

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

                // get an input of 2 integers
                int a = Integer.parseInt(args[0]);
                int b = Integer.parseInt(args[1]);

                // prints them as an equation
                System.out.println(a + " + " + b + " = " + (a+b));
        }
}
```

2. Coins

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

                //get an input of the cents quantity
                int totalcoins = Integer.parseInt(args[0]);

                //calculates the quarters and cents remainder
                int quarters = totalcoins / 25;
                int cents = totalcoins % 25;

                // prints the quarters and cents remainder
                System.out.println("Use " + quarters + " quarters and " + cents + "
cents.");
        }   }
```

3. LinearEq

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

                // get the 3 numbers to use in the equation
                double a = Integer.parseInt(args[0]);
                double b = Integer.parseInt(args[1]);
                double c = Integer.parseInt(args[2]);

                //prints the equation pre-calculation and then after calc
                System.out.println( a + " * x + " + b + " = " + c);
                System.out.println("x = " + (c-b)/a);
        }

}
```

4. Triangle

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

                // get 3 values for the triangle sides
                int a = Integer.parseInt(args[0]);
                int b = Integer.parseInt(args[1]);
                int c = Integer.parseInt(args[2]);

                // define a bool that returns true if the sides can form a triangle or
flase if not
                boolean IsTriangle = ((a+b) >= c && (a+c) >= b && (b+c) >= a);
```

```
                //Prints the result
                System.out.println(a +", " + b + ", " + c +": " + IsTriangle);
        }
    }
```

5. GenThree

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

                // get an input of the numbers range and save the range in an int
                int lowerbound = Integer.parseInt(args[0]);
                int upperbound = Integer.parseInt(args[1]);
                int range = (upperbound - lowerbound);

                //generates 3 randon numbers in the defined range
                int rand1 = (int)((Math.random()* range)+ lowerbound);
                int rand2 = (int)((Math.random()* range)+ lowerbound);
                int rand3 = (int)((Math.random()* range)+ lowerbound);

                //calculate the minimal number out of the randoms
                int minimal = Math.min(Math.min(rand1,rand2), rand3);

                // prints the randoms and the minimal one
                System.out.println(rand1);
                System.out.println(rand2);
                System.out.println(rand3);
```

```
                System.out.println("The minimal generated number was " +
minimal);
        }
}
```