HW01 Code – Noam Adda – ID 209087634

AddTwo:

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

        // Parse the command line arguments
        int a = Integer.parseInt(args[0]);
        int b = Integer.parseInt(args[1]);

        // Print the result in a fancy way
        System.out.println(a + " + " + b + " = " + (a + b));
    }
}
```

Coins:

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

        // Parse the command line arguments
        int coins = Integer.parseInt(args[0]);

        // Calculate the number of quarters and cents that are needed
        int quarters = coins / 25;
        int cents = coins % 25;

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

LinearEq:

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

        // Parse the command line arguments (we assume a != 0 and all values are doubles)
        double a = Double.parseDouble(args[0]);
        double b = Double.parseDouble(args[1]);
        double c = Double.parseDouble(args[2]);

        // Calculate x
        double x = ((c - b) / a);

        // Print the result
        System.out.println(a + " * x + " + b + " = " + c);
        System.out.println("x = " + x);
    }
}
```

Triangle:

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

        // Parse the command line arguments
        int a = Integer.parseInt(args[0]);
        int b = Integer.parseInt(args[1]);
        int c = Integer.parseInt(args[2]);

        // Test if a,b,c can form a triangle
        boolean isTriangle = (a + b) > c && (a + c) > b && (b + c) > a;

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

GenThree:

```
import java.util.Random;

/*
 * Generates three random integers, each in a given range [a,b),
 * prints them, and then prints the minimal number that was generated.
 */
public class GenThree {
    public static void main(String[] args) {

        // Parse the command line arguments
        int a = Integer.parseInt(args[0]);
        int b = Integer.parseInt(args[1]);

        // Generate 3 numbers within that range
        Random random = new Random();

        // Define range and base
        int range = Math.abs(b - a);
        int c = Math.min(a, b);

        // Generate the numbers
        int x = random.nextInt(range) + c;
        int y = random.nextInt(range) + c;
        int z = random.nextInt(range) + c;

        // Find the minimal number generated
        int min = Math.min(x, y);
        min = Math.min(min, z);
```

```
        // Print the result
        System.out.println(x);
        System.out.println(y);
        System.out.println(z);
        System.out.println("The minimal generated number was " + min);
    }
}
```