

HW1 Code – Alon Morad

1. AddTwo

```
public class AddTwo {  
    public static void main(String[] args) {  
        // declares two int variables and gets them from user  
        int a = Integer.parseInt(args[0]);  
        int b = Integer.parseInt(args[1]);  
        // prints the program name and user input  
        System.out.println("% java AddTwo " + a + " " + b);  
        // prints the sum  
        System.out.println(a + "+" + b + "=" + (a+b));  
    }  
}
```

2. Coins

```
public class Coins {  
    public static void main(String[] args) {  
        // declares int variable and gets them from user  
        int cents = Integer.parseInt(args[0]);  
        // prints the program name and user input  
        System.out.println("% java Coins " + cents);  
        // prints the amount of quarters and cents the user needs  
        System.out.println("Use " + cents/25 + " quarters" + "  
and " + cents%25 + " cents");  
    }  
}
```

3. Linear Equation Solver

```
public class LinearEq {  
    public static void main(String[] args) {  
        // declares three double variables and gets them from user  
        double a = Double.parseDouble(args[0]);  
        double b = Double.parseDouble(args[1]);  
        double c = Double.parseDouble(args[2]);  
        // prints the program name and user input  
        System.out.println("% java LinearEq " + a + " " + b + " "  
+ c);  
        // prints the equation and its solution  
        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) {  
        // declares three int variables and gets them from user  
        int a = Integer.parseInt(args[0]);  
        int b = Integer.parseInt(args[1]);  
        int c = Integer.parseInt(args[2]);  
        boolean possible;  
  
        // checks if triangle is possible by calculation of the lengths  
        // of the sides  
        System.out.println("% java Triangle " + a + " " + b + " "  
+ c);  
  
        if (a+b > c && a+c > b && b+c > a)  
            possible = true;  
        else  
            possible = false;  
  
        // prints the sides and if triangle is possible  
        System.out.println(a + ", " + b + ", " + c + ": " +  
possible);  
    }  
}
```

5. Gen3

```
import java.util.Random;

public class Gen3 {
    public static void main(String[] args) {
        // declares two int variables and gets them from user
        int a = Integer.parseInt(args[0]);
        int b = Integer.parseInt(args[1]);
        System.out.println("% java Gen3 " + a + " " + b);
        // creating a new random object
        Random random = new Random();
        // generating three random numbers in range and prints them
        int first = random.nextInt((b - a) + 1) + a;
        int second = random.nextInt((b - a) + 1) + a;
        int third = random.nextInt((b - a) + 1) + a;
        System.out.println(first);
        System.out.println(second);
        System.out.println(third);

        // declaring int variable and sets its value by min function
        // of math class
        int min = Math.min(first, second);

        // checks if third number is smaller than the first&second
        // numbers, if it does its sets as his new value
        min = Math.min(min, third);

        // prints the minimal number that was generated in range
        System.out.println("The minimal generated number was: " +
min);
    }
}
```