Evan Fuller

ADD TWO

```java
/*
 * Adds two given integers and prints the result in a fancy way.
 */
public class AddTwo {
    public static void main(String[] args) {
        // reads two ints from command line
        int a = Integer.parseInt(args[0]);
        int b = Integer.parseInt(args[1]);
        // prints the resulting equation
        System.out.println(a + " + " + b + " = " + (a + b));
    }
}
```

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COINS

```
/*
 * Write a program that gets a quantity of cents as a command-line argument.
 * The program prints how to represent this quantity using as many quarters as
possible, plus the remainder in cents.
 */
public class Coins {
    public static void main(String[] args) {
        // takes int from command line for quantity of cents
        int a = Integer.parseInt(args[0]);
        // calculates number of quarters and cents from int a
        int quarters = a / 25;
        int cents = a % 25;
        // prints number of quarters and cents to use
        System.out.println("Use " + quarters + " quarters and " + cents + "
cents");
    }
}
```

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GENTHREE

```java
/*
 * 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) {
        // takes ints for the bounds from commmand line
        int min = Integer.parseInt(args[0]);
        int max = Integer.parseInt(args[1]) - min;
        // generates three random ints
        int num1 = (int) (Math.random() * max) + min;
        int num2 = (int) (Math.random() * max) + min;
        int num3 = (int) (Math.random() * max) + min;
        // tests for minimum integer
        int minFirst = Math.min(num1, num2);
        int minFinal = Math.min(minFirst, num3);
        // prints values and minimum
        System.out.println(num1);
        System.out.println(num2);
        System.out.println(num3);
        System.out.println(minFinal);
    }
}
```

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LINEAREQ

```
/*
 * Solves linear equations of the form a·x + b = c.
 * The program gets a, b, and c as command-line arguments,
 * computes x, and prints the result.
 * Treats the three arguments as well as the computed value as double values
 */
public class LinearEq {
    public static void main(String[] args) {
        // takes three ints from command line
        double a = Double.parseDouble(args[0]);
        double b = Double.parseDouble(args[1]);
        double c = Double.parseDouble(args[2]);
        // prints out linear equation and value of x
        System.out.println(a + " * x + " + b + " = " + c);
        System.out.println("x = " + ((c - b) / a));
    }
}
```

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TRIANGLE

```java
/*
 * Three sides can form a triangle if the sum of the lengths of any two sides is
greater than the length of the remaining side.
 * This is known as the Triangle Inequality Theorem.
 * Write a program that tests if three given integers form a triangle.
 */
public class Triangle {
    public static void main(String[] args) {
        // takes integers from command line to represent sides of triangle
        int a = Integer.parseInt(args[0]);
        int b = Integer.parseInt(args[1]);
        int c = Integer.parseInt(args[2]);
        // tests triangle inequality theorem
        boolean triangle = ((a + b) > c) & ((b + c) > a) & ((c + a) > b);
        // prints values and whether or not it can form a triangle
        System.out.println(a + ", " + b + ", " + c + ": " + triangle);
    }
}
```