

1. AddTwo

```
/*
 * Adds two given integers and prints the result in a fancy way.
 */
public class AddTwo {
    public static void main(String[] args) {
        int num1 = Integer.parseInt(args[0]);
        int num2 = Integer.parseInt(args[1]);

        int result = num1 + num2;
        System.out.println(num1 + " + " + num2 + " = " + result);
    }
}
```

2. 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) {
        int given_cents = Integer.parseInt(args[0]);

        int quarters = given_cents / 25;
        int remaning_cents = given_cents % 25;

        System.out.println("Use " + quarters + " quarters and " +
            remaning_cents + " cents");
    }
}
```

3. LinearEq

```
/*
 * Solves linear equations of the form  $a \cdot x + b = c$ .
 * 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[]) {
        double a = Double.parseDouble(args[0]);
        double b = Double.parseDouble(args[1]);
        double c = Double.parseDouble(args[2]);

        System.out.println(a + " * x + " + b + " = " + c);

        double result = (c - b) / a;
        System.out.println("x = " + result);
    }
}
```

4. Triangle

```
/*
 * 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) {
        int a = Integer.parseInt(args[0]);
        int b = Integer.parseInt(args[1]);
        int c = Integer.parseInt(args[2]);

        boolean result = true;
        if ((a + b < c) || (b + c < a) || (a + c < b)){
            result = false;
        }

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

5. GenThree

```
/*
 * 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) {
        int a = Integer.parseInt(args[0]);
        int b = Integer.parseInt(args[1]);

        // Finding the lower and higher limit
        int higher_limit = Math.max(a, b);
        int lower_limit = Math.min(a, b);

        int range = higher_limit - lower_limit;

        int first = (int)((Math.random() * range) + lower_limit);
        int second = (int)((Math.random() * range) + lower_limit);
        int third = (int)((Math.random() * range) + lower_limit);

        int minimal = Math.min(Math.min(a, b), c);

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