

AddTwo

```
/*
 * Adds two given integers and prints the result in a fancy
 way.
 */
public class AddTwo {
    public static void main(String[] args) {
        // Gets a,b from the user:
        int a = Integer.parseInt(args[0]);
        int b = Integer.parseInt(args[1]);
        int sum = a + b;
        System.out.println(a + " " + "+" + " " + b + " " + "="
+ " " + sum);
    }
}
```

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 numCents = Integer.parseInt(args[0]);
        int countQuarter = 0;
        int countCents = 0;
        // check the max quarters that the user can use.
        while (numCents >= 25)
        {
            numCents = numCents - 25;
            countQuarter = countQuarter + 1;
        }
        // check the remainder in cents.
        while (numCents > 0)
        {
            numCents = numCents - 1;
            countCents = countCents + 1;
        }
        System.out.println("Use " + countQuarter + " quarters
and " + countCents + " cents");
    }
}
```

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)
    {
        // Gets a,b,c from the user:
        double a = Integer.parseInt(args[0]);
        double b = Integer.parseInt(args[1]);
        double c = Integer.parseInt(args[2]);
        double x;
        x = (c-b)/a;
        //print the equation and its solution
        System.out.println(a + " * x + " + b + " = " + c);
        System.out.println("x = " + x);
    }
}
```

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)
    {
        // Gets a,b,c from the user:
        int a = Integer.parseInt(args[0]);
        int b = Integer.parseInt(args[1]);
        int c = Integer.parseInt(args[2]);
        boolean isTriangle;
        //tests if the three given integers form a triangle
        isTriangle = (a + b > c) && (a + c > b) && (b + c >
a);
        System.out.println(a + ", " + b + ", " + c + ": " +
isTriangle);
    }
}
```

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)
    {
        // get numbers from user and parse them
        int a = Integer.parseInt(args[0]);
        int b = Integer.parseInt(args[1]);
        // Generate three random numbers in the range given by
        user [a, b)
        int random1 = (int)(Math.random() *(b - a))+ a;
        int random2 = (int)(Math.random() *(b - a))+ a;
        int random3 = (int)(Math.random() *(b - a))+ a;
        // find the minimal number that was generated
        int randomMin = Math.min(random3, Math.min(random1,
random2));
        //print outputs
        System.out.println(random1);
        System.out.println(random2);
        System.out.println(random3);
        System.out.println("The minimal generated number was "
+ randomMin);
    }
}
```