

## Java Code Documentation

### AddTwo.java

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

## Java Code Documentation

### Coins.java

```
/*  
  
 * 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.  
  
 */  
  
public class Coins {  
  
    public static void main(String[] args) {  
  
        int total = Integer.parseInt(args[0]);  
  
        int quarters = total / 25;  
  
        int cents = total % 25;  
  
        System.out.println("Use " + quarters + " quarters and " + cents + " cents");  
  
    }  
  
}
```

### 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) {  
  
        int a = Integer.parseInt(args[0]);  
  
        int b = Integer.parseInt(args[1]);  
  
        int min = Math.min(a,b);  
  
        int max = Math.max(a,b);  
  
        int random1 = (int) (Math.random() * (max - min) + min);  
  
        int random2 = (int) (Math.random() * (max - min) + min);  
  
        int random3 = (int) (Math.random() * (max - min) + min);  
  
        int minrandom = Math.min(random1, Math.min(random2,random3));  
  
        System.out.println(random1);  
  
        System.out.println(random2);  
  
        System.out.println(random3);  
  
        System.out.println("The minimal generated number was " + minrandom);  
  
    }  
  
}
```

### LinearEq.java

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

## Java Code Documentation

### 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  
  
 * 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 = ((a+b)>c) && ((a+c)>b) && ((b+c)>a);  
  
        System.out.println(a + ", " + b + ", " + c + ": " + result);  
  
    }  
  
}
```