

Computer science home work- 25.12

AddTwo

```
/*
 * Adds two given integers and prints the result in a fancy way.
 */
public class AddTwo
{
    public static void main(String[] args) {
        // here, the program gets two given numbers
        int First_number = Integer.parseInt(args[0]);
        int Second_number = Integer.parseInt(args[1]);
        //here, the program adds the numbers
        int sum = First_number + Second_number;
        //we print the results
        System.out.println(First_number + " + " + Second_number + " = " + 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)
    {
        //here, our program gets the quantity of cents
        int Total_cents = Integer.parseInt(args[0]);
        //here, the program calculates the quarters and remaining cents
        int quarters = Total_cents / 25;
        int remaining = Total_cents % 25;
        //here, our program prints the number of quarters and remaining cents
        System.out.println("Use " + quarters + " quarters and " + remaining + "
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)
    {
        /*Here, i am getting the arguments according to the description above*/
        double a = Double.parseDouble(args[0]);
        double b = Double.parseDouble(args[1]);
        double c = Double.parseDouble(args[2]);
        /*Here, I am calculating the value of x */
        double x = (c - b) / a;
        //here, the program prints the given form and the value of x
        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)
    {
        /*Here we are getting the values of each of the sides */
        int First_side = Integer.parseInt(args[0]);
        int Second_side = Integer.parseInt(args[1]);
        int Third_side = Integer.parseInt(args[2]);

        /*Here, the program checks the triangle Inequality Theorem */
        if ((First_side + Second_side > Third_side) && (First_side + Third_side >
Second_side) && (Second_side + Third_side > First_side))
        {
            System.out.println(First_side+", "+Second_side+", "+Third_side+":
true");
        }
        else
        {
            System.out.println(First_side+", "+Second_side+",
"+Third_side+":false");
        }
    }
}
```

Gen Three

```
public class GenThree {
    public static void main(String[] args)
    {
        //Here, the program gets the two integers which construct the range
        int FirstValue = Integer.parseInt(args[0]);
        int SecondValue = Integer.parseInt(args[1]);
        //Here, the program generates the numbers from the given range
        int First_Generated = (int) (Math.random()*(SecondValue-FirstValue))+FirstValue;
        //The program casts the double to int
        int Second_Generated = (int)
        (Math.random()*(SecondValue-FirstValue))+FirstValue; //The program casts the double
        to int
        int Third_Generated = (int) (Math.random()*(SecondValue-FirstValue))+FirstValue;
        //The program casts the double to int
        int Minimal_number = Math.min (First_Generated,
        (Math.min(Second_Generated,Third_Generated)));
        //Here, the program is printing the generated values
        System.out.println("First generated: "+First_Generated);
        System.out.println("Second generated: "+Second_Generated);
        System.out.println("Third generated: "+Third_Generated);
        System.out.println("The minimal generated number was " + Minimal_number);
    }
}
```