### **More Exercise: Methods**

Problems for exercise and homework for the "C# Fundamentals" course @ SoftUni You can check your solutions in Judge

# 1. Data Types

Write a program that, depending on the first line of the input, reads an int, a double or a string.

- If the data type is **int**, multiply the number by 2.
- If the data type is real, multiply the number by 1.5 and format it to the second decimal point.
- If the data type is a **string**, surround the input with '\$'.

Print the result on the console.

#### **Examples**

Input	Output
int 5	10
real 2	3.00
string hello	\$hello\$

#### Hint

Try to solve the problem using only one method with different overloads.

#### 2. Center Point

You are given the coordinates of two points on a Cartesian coordinate system - X1, Y1, X2, and Y2. Create a method that prints the point that is closest to the center of the coordinate system (0, 0) in the format (X, Y). If the points are at the same distance from the center, print only the first one.

# **Examples**

Input	Output
2 4 -1 2	(-1, 2)
3 -6 2 10	(3, -6)

### 3. Longer Line

You are given the coordinates of four points in the 2D plane. The first and the second pair of points form two different lines. Print the longer line in the format "(X1, Y1)(X2, Y2)" starting with the point that is closer to the











center of the coordinate system (0, 0). (You can reuse the method that you wrote for the previous problem.) If the lines are of equal length, print only the first one.

#### **Examples**

Input	Output
2	(4, -3)(-5, -5)
2	
-1	
2 -5	
-5	
-5	
4 -3	
-3	
34	(5, 9)(34, -3)
-3	
-3 5 9 -8	
9	
-8	
10	
8	
11	

## 4. Tribonacci Sequence

In the "Tribonacci" sequence, every number is formed by the sum of the previous 3 numbers.

You are given a number num. Write a program that prints num numbers from the Tribonacci sequence, on a single line, starting from 1. The input comes as a parameter named **num**. The value **num** will always be a positive integer.

### **Examples**

Input	Output
4	1 1 2 4

Input	Output							
8	1	1	2	4	7	13	24	44

# 5. Multiplication Sign

You are given a number num1, num2 and num3. Write a program that finds if num1 \* num2 \* num3 (the product) is **negative**, **positive or zero**. Try to do this **WITHOUT** multiplying the 3 numbers.

# **Examples**

Input	Output
2	negative
3	
-1	

Input	Output
2	positive
3	
1	







