## **EXercises: Generics**

You can check your solutions here: <a href="https://judge.softuni.bg/Contests/3181/Generics">https://judge.softuni.bg/Contests/3181/Generics</a>.

# 1. Generic Swap Method Integers

Use the description of the previous problem, but now, test your list of generic boxes with integers.

## **Examples**

Input	Output
3	System.Int32: 42
7	System.Int32: 123
123	System.Int32: 7
42	
0 2	

## 2. Tuple

A <u>Tuple</u> is a class in C#, in which you can store a few objects. First, we are going to focus on the **Tuple's type**, which contains two objects. The first one is "item1" and the second one is "item2". It is kind of like a KeyValuePair, except – it simply has items, which are neither key nor value. Your task is to create a class "Tuple", which holds two objects. The first one, will be "item1" and the second one - "item2". The tricky part here is to make the class hold generics. This means, that when you create a new object of class - "Tuple", there should be a way to explicitly specify both items' type separately.

## Input

The input consists of **three** lines:

- The first one is holding a person's name and an address. They are separated by space(s). Your task is to collect them in the **tuple** and **print** them on the **console**. Format of the input:
  - {first name} {last name} {address}
- The second line holds a name of a person and the amount of beer (int) he can drink. Format: {name} {liters of beer}
- The last line will hold an **integer** and a **double**. Format: {integer} {double}

## Output

Print the tuples' items in format: {item1} -> {item2}

#### **Constraints**

Use the good practices we have learned. Create the class and make it have getters and setters for its class variables. The input will be valid, no need to check it explicitly!

## **Examples**

Input	Output
Adam Smith California	Adam Smith -> California
Mark 2	Mark -> 2
23 21.23212321	23 -> 21.23212321











## 3. Threeuple

Create a Class **Threeuple**. Its name is telling us, that it will hold no longer, just a pair of objects. The task is simple, our Threeuple should hold three objects. Make it have getters and setters. You can even extend the previous class

### Input

The input consists of three lines:

- The first one is holding a name, an address and a town. Format of the input: {first name} {last name} {address} {town}
- The second line is holding a name, beer liters, and a boolean variable with value drunk or not. Format: {name} {liters of beer} {drunk or not}
- The last line will hold a name, a bank balance (double) and a bank name. Format: {name} {account balance} {bank name}

### **Output**

Print the Threeuples' objects in format: "{firstElement} -> {secondElement} -> {thirdElement}"

## **Examples**

Input	Output
Adam Smith Wallstreet New York	Adam Smith -> Wallstreet -> New York
Mark 18 drunk	Mark -> 18 -> True
Karren 0.10 USBank	Karren -> 0.1 -> USBank
Ivan Ivanov TheHills Plovdiv	Ivan Ivanov -> TheHills -> Plovdiv
Mitko 18 not	Mitko -> 18 -> False
George 0.10 NGB	George -> 0.1 -> NGB

**Note:** You may extend your previous solution.















