More Exercise: C# Intro and Basic Syntax

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

1. Sort Numbers

Create a program that receives three real numbers and sorts them in descending order. Print each number on a new line.

Examples

Input	Output
2 1 3	3 2 1
-2 1 3	3 1 -2
0 0 2	2 0 0

2. English Name of the Last Digit

Create a **method** that returns the **English spelling** of the last digit of a given number. Write a program that reads an integer and prints the returned value from this method.

Examples

Input	Output
512	two
1	one
1643	three

3. Gaming Store

Create a program, which helps you buy the games. The **valid games** are the following games in this table:

Name	Price
OutFall 4	$39.99
CS: OG	$15.99
Zplinter Zell	$19.99
Honored 2	$59.99
RoverWatch	$29.99

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RoverWatch Origins Edition	$39.99

On the first line, you will receive your **current balance** – a **floating-point** number in the range **[0.00…5000.00]**.

Until you receive the command **"Game Time"**, you have to keep **buying games**. When a **game** is **bought**, the user's **balance** decreases by the **price** of the game.

Additionally, the program should obey the following conditions:

- If a game the user is trying to buy is **not present** in the table above, print "**Not Found**" and **read the next line**.
- If at any point, the user has **$0** left, print "**Out of money!**" and **end the program**.
- Alternatively, if the user is trying to buy a game that they **can't afford**, print "**Too Expensive**" and **read the next line**.
- If the game exists and the player has the money for it, print **"Bought {nameOfGame}"**.

When you receive "**Game Time**", **print** the user's **remaining money** and **total spent on games**, **rounded** to the **2nd decimal place**.

Examples

Input	Output
120 RoverWatch Honored 2 Game Time	Bought RoverWatch Bought Honored 2 Total spent: $89.98. Remaining: $30.02
19.99 Reimen origin RoverWatch Zplinter Zell Game Time	Not Found Too Expensive Bought Zplinter Zell Out of money!
79.99 OutFall 4 RoverWatch Origins Edition Game Time	Bought OutFall 4 Bought RoverWatch Origins Edition Total spent: $79.98. Remaining: $0.01

4. Reverse String

Create a program which reverses a string and prints it on the console.

Examples

Input	Output
Hello	olleH
SoftUni	inUtfoS
1234	4321

5. Messages

Create a program, which emulates **typing an SMS**, following this guide:

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1	**2** abc	**3** def
4 ghi	**5** jkl	**6** mno
7 pqrs	**8** tuv	**9** wxyz
	0 space	

Following the guide, **2** becomes '**a**', **22** becomes '**b**' and so on.

Examples

Input	Output
5 44 33 555 555 666	hello

Input	Output
9 44 33 999 0 8 44 33 777 33	hey there

Input	Output
7 6 33 33 8 0 6 33	meet me

Hints

- A naive approach would be to just put all the possible combinations of digits in a giant **`switch`** statement.
- A cleverer approach would be to come up with a **mathematical formula**, which **converts** a **number** to its **alphabet** representation:

Digit	2	3	4	5	6	7	8	9
Index	0 1 2	3 4 5	6 7 8	9 11 12	13 14 15	16 17 18 19	20 21 22	23 24 25 26
Letter	a b c	d e f	g h i	j k l	m n o	p q r s	t u v	w x y z

- Let's take the number **222** (**c**) for example. Our algorithm would look like this:
  - Find the **number of digits** the number has, e.g. **222** ➔ **3 digits**
  - Find the **main digit** of the number, e.g. **222** ➔ **2**
  - Find the **offset** of the number. To do that, you can use the formula: **`(main digit - 2) * 3`**
  - If the main digit is **8 or 9**, you need to **add 1** to the **offset**, since the digits **7** and **9** have **4 letters each**
  - Finally, find the **letter index** (a ➔ 0, c ➔ 2, etc.). To do that, you can use the following formula: **`(offset + digit length - 1)`**.
  - After you've found the **letter index**, you can just add that to **the ASCII code** of the lowercase letter '**a**' (97)

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