More Exercise: Strings and Text Processing

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

1. Extract Person Information

Create a program that reads **N** lines of strings and extracts the **name** and **age** of a given person. The name of the person will be **between '@'** and **'|'**. The person's **age** will be **between '#'** and **'*'**.

Example: "`Hello my name is @Peter| and I am #20* years old.`"

For each found name and age **print** a line in the following format **"`{name} is {age} years old.`"**

Example

Input	Output

`2`
`Here is a name @George| and an age #18*`
`Another name @Billy| #35* is his age`
	`George is 18 years old.`
	`Billy is 35 years old.`

`3`
`random name @lilly| random digits #5* age`
`@Marry| with age #19*`
`here Comes @Garry| he is #48* years old`
	`lilly is 5 years old.`
	`Marry is 19 years old.`
	`Garry is 48 years old.`

2. Ascii Sumator

Create a program that prints a **sum of all characters between two given characters** (their **ASCII code**). On the **first line,** you will get a **character**. On the **second line,** you get **another character**. On the **last line,** you get a **random string**. Find all the characters **between the two given** and **print their ASCII sum**.

Example

Input	Output

`.`
`@`
`dsg12gr5653feee5`
	363

? E @ABCEF	262

3. Treasure Finder

Create a program that **decrypts a message** by a given **key** and gathers information about hidden **treasure type** and its **coordinates.** On the **first line,** you will receive a **key (sequence of numbers).** On the **next few lines, until you receive "`find`",** you will get lines of **strings**. You have to **loop through every string** and **decrease the ASCII code of each character** with a **corresponding number of the key** sequence. The way you choose a key number from the sequence is by just **looping through it**. If the **length of the key** sequence is **less than the string** sequence, you start **looping from the beginning of the key.** For more clarification see the example below. **After decrypting** the message you will **get a type of treasure and its coordinates.** The **type** will be **between** the symbol **'&'** and the coordinates will be between the symbols **'<'** and **'>'**. For each line, **print the type and the coordinates** in format **"Found {type} at {coordinates}"**.

Example

Input	Output	Comment
1 2 1 3 ikegfp'jpne)bv=41P83X@ ujfufKt)Tkmyft'duEprsfjqbv fv=53V55XA find	Found gold at 10N70W Found Silver at 32S43W	We start looping through the first string and the key. When we reach the end of the key we start looping from the beginning of the key, but we continue looping through the string (until the string is over). The first message is: **"hidden&gold&at<10N70W>"** so we print "Found gold at 10N70W**".** We do the same for the second string **"thereIs&Silver&atCoordinates<32S43W>"**(starting from the beginning of the key and the beginning of the string).

4. Morse Code Translator

Create a program that translates messages from **Morse code to English** (**capital letters).** Use this page to help you (**without the numbers**). The words will be separated by a **space (' ')**. There will be a **'|'** character which you should **replace with ' '** (space).

Example

<table>
<tr><th>Input</th><th>Output</th></tr>
<tr><td>.. | -- .- -.. . | -.-- --- ..- | .-- .-. .. - . | .- | .-.. --- -. --. | -.-. --- -.. .</td><td>I MADE YOU WRITE A LONG CODE</td></tr>
<tr><td>.. | .... --- .--. . | -.-- --- ..- | .- .-. . | -. --- - | -- .- -..</td><td>I HOPE YOU ARE NOT MAD</td></tr>
</table>

5. HTML

You will receive **3 lines** of input. On the **first line** you will receive a **title of an article**. On the **next line** you will receive the **content of that article**. On the next **n** lines, until you receive **"end of comments",** you will get the **comments about the article**. Print the **whole information in HTML format**. The **title** should be in **h1 tag (<h1></h1>);** the **content** in **article tag (<article></article>);** each **comment** should be in **div tag (<div></div>).** For more clarification see the example below.

Example

Input	Output
SoftUni Article Some content of the SoftUni article some comment more comment	<h1> SoftUni Article </h1> <article>

last comment end of comments	Some content of the SoftUni article </article> <div> some comment </div> <div> more comment </div> <div> last comment </div>