## Problem 1 – Multiverse Communication

One day, after eating too much pizza, the **master-programmers** Niki, Toni and Ivo started talking about "highly-intelligent" topics – how the universe **started**, who created it, are there other **advanced** forms of life, what kind of girls are hot and so on. Suddenly they received an **answer** from beyond to one of the biggest mysteries for the mankind – there is more than one universe in the space-time continuum! As a matter of fact – they are **infinite** – a multiverse to rule them all! How cool is that, huh?

So, back to our story – somewhere in between the wormholes, dark matter and a lot of space-flying Zerg Mutalisks, there was another universe almost **identical** to ours. The very same day after eating too much spaghetti, Ikin, Inot and Ovi (being well trained Terran Ghosts), decided to send telepathically an **encrypted numerical message** to our well-known software engineers.

The sent message is made of the following digits:

| | |
|----|-----|
| 0 | CHU |
| 1 | TEL |
| 2 | OFT |
| 3 | IVA |
| 4 | EMY |
| 5 | VNB |
| 6 | POQ |
| 7 | ERI |
| 8 | CAD |
| 9 | K-A |
| 10 | IIA |
| 11 | YLO |
| 12 | PLA |

The message is written as a **sequence of digits**. The last digit of the number (the most right one) has a value as shown in the above table. The next digit on the left has a value **13** times bigger than the shown in the above table, the next digit on the left has **13*13** times bigger value than the shown in the table and so on. Since our masters are too lazy after so much pizza and do not want to think (and code C# too), you task is to **translate the message into its decimal representation**. With your help, our heroes can fall asleep calmly, knowing other universes exist somewhere.

### Input

The input data consists of a single line – the message from the parallel universe.

The input data will always be valid and in the described format. There is no need to check it explicitly.

## Output

The output data consists of a single line holding the calculated decimal representation of the given message number and should be printed at the console.

## Constraints

- The input number will have between 1 and 9 digits.
- Allowed working time for your program: 0.1 seconds.
- Allowed memory: 16 MB.

## Examples

| Input | Output | Explanation |
|---|---|---|
| OFT | 2 | From the table **OFT** means **2** in $13^{th}$ based numeral system. Message is **2**. After converting it to decimal – the answer is **2**. |

| Input | Output | Explanation |
|---|---|---|
| IVAYLO | 50 | From the table **IVA** means **3** and **YLO** means **B (11)** in $13^{th}$ based numeral system. Message is **3B**. After converting it to decimal – the answer is **50**. |

| Input | Output | Explanation |
|---|---|---|
| TELERIK-ACADEMY | 45569 | From the table **TEL** means **1**, **ERI** means **7**, **K-A** means **9**, **CAD** means **8** and **EMY** means **4** in $13^{th}$ based numeral system. Message is **17984**. After converting it to decimal – the answer is **45569**. |