P0007. Egyptian numbers   P89342_en
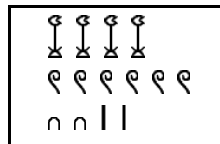
The ancient Egyptians wrote the numbers with hieroglyphs that denote the powers of ten:

value	1	10	100	1000	10000	100000	1000000
hieroglyph							
description	bar	horseshoe	rope	lotus	finger	frog or tadpole	man
equivalent	'—A—'	'—B—'	'—C—'	'—D—'	'—E—'	'—F—'	'—G—'

To form a number, these hieroglyphs are repeated so many times as necessary (until a maximum of nine times), and are closed in a box called stamp". For instance, with the Egyptian system, 4622 can be written like:

In the following photo of a wall of a temple of Karnak there is the number 1333330:

In this problem we will write Egyptian numbers, but instead of hieroglyphs, we will use the equivalent letters (see the table above). We will write the numbers in a stamp that will internally have width 9, and the height will be equal to the number of digits different than zero. The letters will be equal in each row, with declining weights from top to bottom. Thus, 4622 and 1333330 are represented:

```
+————————+          +————————+
|DDDD    |          |G       |
|CCCCCC  |          |FFF     |
|BB      |          |EEE     |
|AA      |          |DDD     |
+————————+           |CCC    |
                     |BBB     |
                     +————————+
```

Input

The input is a sequence of cases, each one in a line. Every line starts with a word that identifies it, and continues with a sequence of natural numbers ending with −1. The sum of the natural numbers of each sequence will have seven digits at most.

Output

For each input case, print the identifier, followed by the stamp corresponding to the sum of the natural numbers of the case. Your program must print an empty line after each case.

Sample input

```
isis 1333330 −1
osiris 4622 −1
tutankamon 6 6 0 45 3000 14 −1
papirus −1
ra 0 9999999 0 −1
```

Sample output

```
isis
+---------+
|G        |
|FFF      |
|EEE      |
|DDD      |
|CCC      |
|BBB      |
+---------+

osiris
+---------+
|DDDD     |
|CCCCCC   |
|BB       |
|AA       |
+---------+

tutankamon
+---------+
|DDD      |
|BBBBBBB  |
|A        |
+---------+

papirus
+---------+
+---------+

ra
+---------+
|GGGGGGGGG|
|FFFFFFFFF|
|EEEEEEEEE|
|DDDDDDDDD|
|CCCCCCCCC|
|BBBBBBBBB|
|AAAAAAAAA|
+---------+
```

Problem information

Author : Professorat de P1
Translator : Carlos Molina
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