C++ Fundamentals - Exam (17 November 2019)

Write C++ code for solving the tasks on the following pages.

Code should compile under the C++11 standard.

Submit your solutions here:

https://judge.softuni.bg/Contests/1751/CPlusPlus-Fundamentals-Exam-17-November-2019

Only source code will be accepted as solution for each task.

Task 4 – Mayan Calculator

Since ancient times the Mayan people had special flow of describing numbers.

Your job is to understand their technique of describing numbers and start re-using it.

You will be provided with exact description for the digits "0123456789" (exactly in that order).

Their representation may span on several lines.

After that you will be provided with a simple integer, which you should represent in the provided Mayan representation.

NOTE: the width of the numbers is not provided to you, but you are assured that:

```
width of digit 0 == width of digit 1 == width of digit 2 == ... == width of digit 9
```

Example input:

```
//number of lines for Mayan digits representation

aabbccddeeffgghhiiji //digits '0123456789' 1st row

aabbccddeeffgghhiiji //digits '0123456789' 2nd row

//number to represent
```

Example output:

iiddddaa

iiddddaa

Input

First a single integers (N) indicating how many lines of 'digit representing data'.

Next read (N) lines of 'digit representing data'. Digit will only be represented in the '0123456789' exact order.

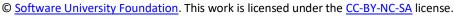
On the last row – read a single integer (T) – the number to represent (print to the console) with the Mayan description.

Restrictions

Number to represent (T) will never begin with a leading zero (0).

Time limit: 250ms (0.25s) Memory limit: 16 MB





















Examples

| Input | Output |
|----------------------|----------------------------------|
| 1 | 20024 |
| 0123456789 | |
| 20024 | |
| | |
| 2 | iiddddaa |
| aabbccddeeffgghhiijj | iiddddaa |
| aabbccddeeffgghhiijj | |
| 8330 | |
| | |
| 4 | //\ //\ |
| //\/\ / | / / /_ <mark>/</mark> _\/ _ |
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