

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:

```
2 //number of lines for Mayan digits representation
aabbccddeeffgghhiijj //digits '0123456789' 1st row
aabbccddeeffgghhiijj //digits '0123456789' 2nd row
8330 //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 0123456789 20024	20024
2 aabbccddeeffgghhiijj aabbccddeeffgghhiijj 8330	iiddddaa iiddddaa
4 -- /\ \ / - - - - - / / \ / _ _ \ / \ / \ - -- - - - \ / - - - - / - - - 1370425869	/\ - - - - / \ - - - - - / / / _ / _ \ _ \ \ / / \ - - - \ / - - - - - - - - - -