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	//\---- //\-------- /| / |||/_ /|_\/|_|| | \ /|| |/ |/\\||-| --\// -- ----------