

# 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
<p>1</p> <p>0123456789</p> <p>20024</p>	<p>20024</p>
<p>2</p> <p>aabbccddeeffgghhiijj</p> <p>aabbccddeeffgghhiijj</p> <p>8330</p>	<p>iiddddaa</p> <p>iiddddaa</p>
<p>4</p> <p>-- / \ / \ / - - - - -</p> <p>   /   / / _   _     \    </p> <p>   / \         / \ -  </p> <p>-- - - - \ / - - - - / - - -</p> <p>1370425869</p>	<p>/ \ - - - - / \ - - - - -</p> <p>/   /       / _ /   \      </p> <p>  \ /       / \     -  </p> <p>-- \ / - - - - - - - - -</p>