# 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

**aa**bbcc**dd**eeffgghh**ii**jj //digits ‘0123456789’ 1st row

**aa**bbcc**dd**eeffgghh***ii***jj //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 | //\---- //\--------  /| / |||/\_ /|\_\/|\_||  | \ /|| |/ |/\||-|  --\// -- ----------- |