

Project Euler #67: Maximum path sum II



This problem is a programming version of [Problem 67](#) from [projecteuler.net](#)

By starting at the top of the triangle below and moving to adjacent numbers on the row below, the maximum total from top to bottom is **23**. The path is denoted by numbers in bold.

```
3
7
4
9
```

That is, $3 + 7 + 4 + 9 = 23$.

Find the maximum total from top to bottom of the triangle given in input.

Input Format

First line contains T , the number of testcases. For each testcase:

First line contains N , the number of rows in the triangle.

For next N lines, i 'th line contains i numbers.

Constraints

$$1 \leq T \leq 10$$

$$1 \leq N \leq 100$$

Each element of triangle lies between 0 and 100(both inclusive).

Output Format

Print the required answer for each testcase on a new line.

Sample Input

```
2
4
3
7 4
2 4 6
8 5 9 3
4
3
7 4
2 4 6
8 5 9 3
```

Sample Output

```
23
23
```