Problem 1: The Triangle

Figure 1 shows a number triangle. Write a program that calculates the highest sum of numbers passed on a route that starts at the top and ends somewhere on the base.

- Each step can go either diagonally down to the left or diagonally down to the right.
- The number of rows in the triangle is >1 but <=100.
- The numbers in the triangle, all integers, are between 0 and 99.

Input Data

Data about the number of rows in the triangle are first read from the INPUT.TXT file. In our example, INPUT.TXT appears as follows:

```
5
7
3 8
8 1 0
2 7 4 4
4 5 2 6 5
```

Output Data

The highest sum is written as an integer in the ${\tt OUTPUT.TXT}$ file. In our example: 30