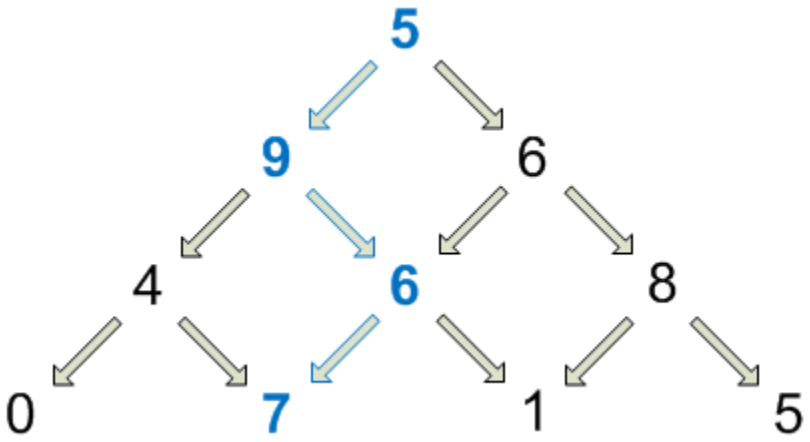
Triangle Puzzle

Consider the triangle below.



This triangle would be represented by the following input file.

```
5
9 6
4 6 8
0 7 1 5
```

By starting at the top and moving to adjacent numbers on the row below, one creates a path to the bottom of the triangle. There are many such paths in a triangle, which may have different weights. The weight of a path is the sum of all numbers encountered along the way. Write a program to find the weight of the path with the highest weight for a given triangle.

In this example, the maximum sum from top to bottom is 27, and is found by following the blue path. 5 + 9 + 6 + 7 = 27.

(More formally: The triangle is an acyclic digraph, and each number represents the value of a node. Each node has either two or zero direct successors, as shown by the arrows above. A complete path is a path which begins at the root node—the one with no immediate predecessors—and ends at a node with no immediate successors. The weight of a complete path is the sum of the values of all nodes in the path graph. Write a program which finds the weight of the complete path with the largest weight for a given triangle.)

Attached are two sample files – one represents the example above and another has 100 rows. Your program should take the name of a file as an argument, read the file's contents, and print out the weight of the path with the highest weight.