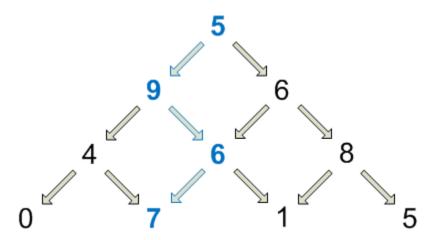
Triangle Puzzle

Consider the triangle below.



This triangle would be represented by the following input file.

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.