

Homeshore COW

Week 39-40, deadline Oktober 13

Greedy little Cows

The roleplaying COW has put on the persona of a greedy little dwarven miner. It is venturing deep into the mines of Moria in search of Mithril and gold. Since you have been given the role of the cartographer, the demanding little COW is requesting that you provide it with a map to most impressive hoard possible.

Just to make matters worse, the Balrog of Moria has cast the dreaded curse of only walking forward and right.

Input

The mines of Moria are ordered in a grid, just like in the movie.

The first line of the input will consist of two integers that tell you the number of rows and columns in the grid respectively.

A grid of numbers ranging from 0 to 99 representing the monetary value of that rooms loot. The grids are given as multiple lines of space separated numbers. The entrance to the mine is in the lower left corner of the grid. The exit is in the upper right corner.

Files with input will be found here: **I:\hs\Teams\Pelican\Homeshore COW\Week 40** from the beginning of week 39.

Output

An integer representing the total value of the hoard.

Bonus challenge

"The COWs delved too greedily and too deep."

Not satisfied with the surface level loot, our intrepid adventurer has gone down the Endless stair and stopped further down on a dark landing, hearing the faintly whispered promises of unimaginable wealth.

In addition to the loot from the surface level, grab the maximum amount of loot in the deeper maze, but watch out for greedy gnomes and vicious burrahobbits. Fighting them means losing more loot. In terms of programming, that means that some of the numbers will be negative, deducting from the overall haul.

In this second maze the Balrog's curse no longer applies, but our hero is instead chased by a hoard of orcs from room to room. Some orcs linger in every traversed room and thus the COW can't visit any room more than once.

To make matters worse, laden with loot the poor COW-dwarf grows increasingly weary and will drop wealth for each room the cow enters, starting with 1 point for the first room, 2 for the second etc.

On this level the entrance is still in the lower left corner, but the exit is any room on the edge of the grid.

How to get extra credit

Solve the problem with a braided beard (for those less endowed in the facial hair department, a braided fake beard is fine)

Submission rules

Submit your solution to your own directory under **I:\hs\Teams\Pelican\Homeshore COW\Week 40**. Use your own name(s) when naming the directory.

