We all love algorithms, don’t we?  
One of my favorites is to calculate the ***cheapest*** path in a graph, grid or similar.

Sometimes the rules can be complicated but for this task we will keep it simple.

You are only allowed to move **UP, LEFT, DOWN and RIGHT (NOT DIAGONALLY).**

In the example below you can see the cheapest path starting from top left corner going all the way down to the bottom right corner.

1163751742

1381373672

2136511328

3694931569

7463417111

1319128137

1359912421

3125421639

1293138521

2311944581

The **cost** of this path is **40** (not including the top left corner), however, I will accept an answer with that one included as well.

**What is the cheapest path from the top left corner to the bottom right corner in your input?**

**HINT:** Did you ever explore the data structure **Priority queue**?