**Q 8.2** (pg. 135 *Cracking the Coding Interview, 6th Edition*)

Imagine a robot sitting on the upper left corner of a grid with r rows and c columns. The robot can only move in two directions, right and down, but certain cells are “off limits” such that the robot cannot step on them. Design an algorithm to find a path from the robot from the top left to the bottom right.

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*Hint 1*: For the robot to reach the last cell, it must find a path to the second-to-last cells. For it to find a path tot eh second-to-last cells, it must find a path to the third-to-last cells.

*Hint 2*: Simplify this problem a bit by first figuring out if there’s a path. Then, modify your algorithm to track the path.

*Hint 3*: Think again about the efficiency of your algorithm. Can you optimize it?