For lab 7 you wrote a program that created a maze where each cell was reachable from any other cell and there was a unique path from the start to the destination. Your task for this lab consists of designing and implementing a backtracking algorithm to find the path from the start to the destination. In contrast to lab 8, this time you should not use a graph representation of the maze; you should use a boolean array to encode the positions that have been visited during a given search. Your method should display the sequence of movements (N, E, S, or W) required to reach the destination and also display the path encoded by that sequence. For example, for the maze shown below, your program should output the following sequence:

\[ E - E - E - N - E - E - N - E - N - N - N - N \]

Given that short time available, we will not require a demo for this lab, thus it is very important that your report accurately describes your work.