

DAILY DSA | DAY-17 | Queues - Practise|
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Let's solve the shortest path using a breadth-first search algorithm (Queues)!

Problem:

In a given grid of 0s and 1s, we have some starting rows and columns sr, sc and a target row and column tr, tc. **Return the length of the shortest path from sr, sc to tr, tc** that walks along 1 value only.


Each location in the path, including the start and the end, must be a 1. Each subsequent location in the path must be 4-directionally adjacent to the previous location.

It is guaranteed that $\text{grid}[\text{sr}][\text{sc}] = \text{grid}[\text{tr}][\text{tc}] = 1$, and the starting and target positions are different.

If the **task is impossible, return -1.**

Example:

```
input:
grid = [[1, 1, 1, 1], [0, 0, 0, 1], [1, 1, 1, 1]]
sr = 0, sc = 0, tr = 2, tc = 0
output: 8
(The lines below represent this grid:)
1111
0001
1111
  
```



```
grid = [[1, 1, 1, 1], [0, 0, 0, 1], [1, 0, 1, 1]]
sr = 0, sc = 0, tr = 2, tc = 0
output: -1
(The lines below represent this grid:)
1111
0001
1011
  
```