

Challenge 12 - Taxi Driver



You are a taxi driver and you want to offer customers the fastest service possible. You drive in a city that has special traffic rules:

- You are only allowed to make turns to the right.
- You cannot turn and continue in the same position.
- You cannot go in reverse or make 180° turns.

Calculate the length of the shortest path from the starting point to the destination.

Example

```
.....#.
..#.....
.....#..
.S...#.X
.....#..
.....
```

- S = start
- X = destination
- # = walls

Possible solution

```

.....#.
..# ┌───┐
... │ .# │
.S └─┬─┘ #.X
...  └─┬─┘ #..
.....

```

Length: 14

Input format

The input starts with a number (T) indicating the number of cases. Each case is comprised by two numbers (M, N), followed by N lines of the map. M and N are the width and height of the map.

Output format

For each case, print:

Case #Ti: Ri

Where Ti is the number of the test case and Ri the result for that case.
If the destination cannot be reached, the result should be ERROR.

Limits

T ≤ 20

M, N ≤ 100

Submit & test your code

To test and submit code we provide a set of tools to help you. Download [contest tools](#) if you haven't already done that. You will then be able to test and submit your solution to this challenge with the challenge token.

Challenge token: BYVrSCVVB8HcVyLLRbwS

To test your program

```
./test_challenge BYVrSCVVB8HcVyLLRbwS path/program
```

A nice output will tell you if your program got the right solution or not. You can try as many times as you need.

To submit your program to the challenge

```
./submit_challenge BYVrSCVVB8HcVyLLRbWS path/source_pkg.tgz  
path/program
```

Note that you first need to solve the test phase before submitting the code. During the submit phase, in some problems, we might give your program harder questions, so try to make your program failsafe.

Important: In this phase, you must provide the source code used to solve the challenge and, if necessary, a brief explanation of how you solved it.

Remember **you can only submit once!** Once your solution is submitted you won't be able to amend it to fix issues or make it faster, so please be sure your solution is finished before submitting it.

If you have any doubts, please check the [info section](#).

Go ahead

I'm done! :)

Once you have submitted your code, hit refresh and continue to next challenge.

I'm stuck! :(

Be sure you follow the [Tuenti Engineering](#) twitter for updates and possible hints during the contest.

If this challenge is too hard and you are blocked, you will be able to skip it after two hours. Note that **you won't be able to complete it later**, and you have a limited number of challenges to skip.

Finally, if you run out of skips but are still really stuck with one problem, you will be able to skip it after 24 hours.

Challenge status:

Test case	Not done
Solution submitted	Not done
Skip	You still have to wait 0h, 29m and 31s to be able to skip this challenge

Refresh status

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