19m left

3. Tool List

⌘

ALL

ⓘ

1

2

3

A milling machine in a manufacturing facility has a tool change system. The tool changer holds *n* tools and some duplicate tools may be included. The operator must move through the tools one at a time, either moving left or right. The tool changer is circular, so when the last tool in the *tools* array is reached in either direction, the next tool is at the other end of the array.

Given the name of the next tool needed, determine the minimum number of left or right moves to reach it.

Example:

tools = ['ballendmill', 'keywaycutter', 'slotdrill', 'facemill']
startIndex = 1
target = 'ballendmill'

The tool currently in use is *keywaycutter* at index *1*. The desired tool is *ballendmill* at index *0*. It can be reached by moving right *3* steps or left *1* step. The minimum number of moves is *1*.

Function Description Complete the function *toolchanger* in the editor below.

toolchanger has the following parameter(s):
    str tools[n]: an array of tool names arranged in the order they appear in the tool changer
    int startIndex: index of the tool currently in use
    str target: name of the tool needed
Returns:
    int: minimum number of moves required to reach the needed tool

Constraints

- *1 ≤ n ≤ 100*
- *0 ≤ startIndex ≤ n−1*
- *1 ≤ lengths of tools[i] and target ≤ 100*
- *target* is in *tools*

▶ **Input Format for Custom Testing**

▼ **Sample Case 0**