

## 657. Robot Return to Origin

Solved

Easy Topics Companies

There is a robot starting at the position  $(0, 0)$ , the origin, on a 2D plane. Given a sequence of its moves, judge if this robot **ends up at**  $(0, 0)$  after it completes its moves.

You are given a string `moves` that represents the move sequence of the robot where `moves[i]` represents its  $i^{\text{th}}$  move. Valid moves are 'R' (right), 'L' (left), 'U' (up), and 'D' (down).

Return `true` if the robot returns to the origin after it finishes all of its moves, or `false` otherwise.

**Note:** The way that the robot is "facing" is irrelevant. 'R' will always make the robot move to the right once, 'L' will always make it move left, etc. Also, assume that the magnitude of the robot's movement is the same for each move.

### Example 1:

**Input:** `moves = "UD"`

**Output:** `true`

**Explanation:** The robot moves up once, and then down once. All moves have the same magnitude, so it ended up at the origin where it started. Therefore, we return `true`.

### Example 2:

**Input:** `moves = "LL"`

**Output:** `false`

Description | Accepted | Editorial | Solutions | Submissions

← All Submissions

Accepted

Zhukovitya submitted at Jun 26, 2024 13:33

Editorial Solution

Runtime

66 ms | Beats 20.32%

Memory

42.59 MB | Beats 96.81%

Analyze Complexity

Code | C#

```
public class Solution {
    public bool JudgeCircle(string moves) {
        int x = 0, y = 0;

        foreach (char move in moves) {
            if (move == 'R') {
```

Code

```
1 public class Solution {
2     public bool JudgeCircle(string moves) {
3         int x = 0, y = 0;
4
5         foreach (char move in moves) {
6             if (move == 'R') {
7                 x++;
8             } else if (move == 'L') {
9                 x--;
10            } else if (move == 'U') {
11                y++;
```

Testcase | Test Result

Accepted Runtime: 55 ms

Case 1 Case 2

Input

`moves = "UD"`

Output

`true`

Expected

Код:

```
public class Solution
{
    public bool JudgeCircle(string moves)
    {
        int x = 0, y = 0;
```

```
foreach (char move in moves)
{
    if (move == 'R')
    {
        x++;
    }
    else if (move == 'L')
    {
        x--;
    }
    else if (move == 'U')
    {
        y++;
    }
    else if (move == 'D')
    {
        y--;
    }
}

return x == 0 && y == 0;
}
```