

1404. Number of Steps to Reduce a Number in Binary Representation to One

Description

Given the binary representation of an integer as a string `s`, return *the number of steps to reduce it to 1* under the following rules:

- If the current number is even, you have to divide it by 2.
- If the current number is odd, you have to add 1 to it.

It is guaranteed that you can always reach one for all test cases.

Example 1:

```
Input: s = "1101"
Output: 6
Explanation: "1101" corresponds to number 13 in their decimal representation.
Step 1) 13 is odd, add 1 and obtain 14.
Step 2) 14 is even, divide by 2 and obtain 7.
Step 3) 7 is odd, add 1 and obtain 8.
Step 4) 8 is even, divide by 2 and obtain 4.
Step 5) 4 is even, divide by 2 and obtain 2.
Step 6) 2 is even, divide by 2 and obtain 1.
```

Example 2:

```
Input: s = "10"
Output: 1
Explanation: "10" corresponds to number 2 in their decimal representation.
Step 1) 2 is even, divide by 2 and obtain 1.
```

Example 3:

```
Input: s = "1"
Output: 0
```

Constraints:

- `1 <= s.length <= 500`
- `s` consists of characters '0' or '1'
- `s[0] == '1'`

