

# 2325. Number of Ways to Select Buildings

## Difficulty : Medium

<https://leetcode.com/problems/number-of-ways-to-select-buildings>

You are given a **0-indexed** binary string  $s$  which represents the types of buildings along a street where:

- $s[i] = '0'$  denotes that the  $i^{\text{th}}$  building is an office and
- $s[i] = '1'$  denotes that the  $i^{\text{th}}$  building is a restaurant.

As a city official, you would like to **select** 3 buildings for random inspection. However, to ensure variety, **no two consecutive** buildings out of the **selected** buildings can be of the same type.

- For example, given  $s = "001101"$ , we cannot select the 1<sup>st</sup>, 3<sup>rd</sup>, and 5<sup>th</sup> buildings as that would form "011" which is **not** allowed due to having two consecutive buildings of the same type.

Return *the **number of valid ways** to select 3 buildings*.

### Example 1:

**Input:**  $s = "001101"$

**Output:** 6

**Explanation:**

The following sets of indices selected are valid:

- $[0,2,4]$  from "001101" forms "010"
- $[0,3,4]$  from "001101" forms "010"
- $[1,2,4]$  from "001101" forms "010"
- $[1,3,4]$  from "001101" forms "010"
- $[2,4,5]$  from "001101" forms "101"
- $[3,4,5]$  from "001101" forms "101"

No other selection is valid. Thus, there are 6 total ways.

### Example 2:

**Input:**  $s = "11100"$

**Output:** 0

**Explanation:** It can be shown that there are no valid selections.

### Constraints:

- $3 \leq s.length \leq 10^5$
- $s[i]$  is either '0' or '1'.