

256. Paint House Premium

Solved 

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There is a row of n houses, where each house can be painted one of three colors: red, blue, or green. The cost of painting each house with a certain color is different. You have to paint all the houses such that no two adjacent houses have the same color.

The cost of painting each house with a certain color is represented by an $n \times 3$ cost matrix `costs`.

- For example, `costs[0][0]` is the cost of painting house 0 with the color red; `costs[1][2]` is the cost of painting house 1 with color green, and so on...

Return the minimum cost to paint all houses.

Example 1:

Input: `costs = [[17,2,17],[16,16,5],[14,3,19]]`

Output: 10

Explanation: Paint house 0 into blue, paint house 1 into green, paint house 2 into blue.

Minimum cost: $2 + 5 + 3 = 10$.

Example 2:

Input: `costs = [[7,6,2]]`

Output: 2

Constraints:

- `costs.length == n`
- `costs[i].length == 3`
- `1 <= n <= 100`
- `1 <= costs[i][j] <= 20`

Seen this question in a real interview before? 1/5

☒ Yes ☐ No

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 2.3K  15   

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C++ 

```
1  class Solution {
2  public:
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19  };
```

 Saved

 Testcases

Case 1

costs =

[[17,2,19],