# 5421. Allocate Mailboxes

My Submissions (/contest/biweekly-contest-28/problems/allocate-mailboxes/submissions/)

Back to Contest (/contest/biweekly-contest-28/)

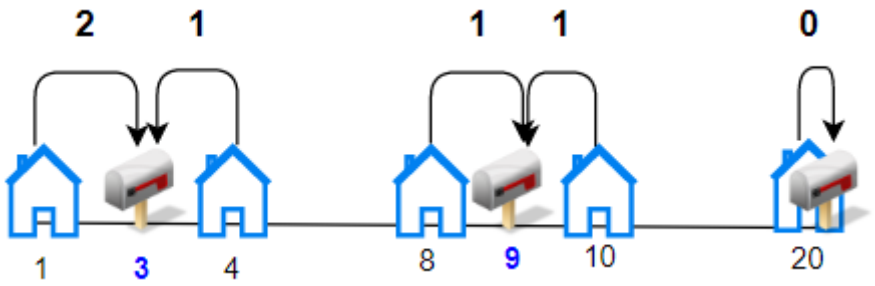
Given the array `houses` and an integer `k`. where `houses[i]` is the location of the ith house along a street, your task is to allocate `k` mailboxes in the street.

Return the **minimum** total distance between each house and its nearest mailbox.

The answer is guaranteed to fit in a 32-bit signed integer.

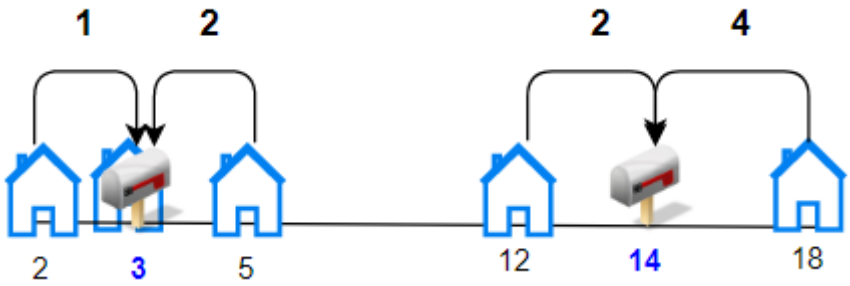
| | |
|---|---|
| **User Accepted:** | 0 |
| **User Tried:** | 0 |
| **Total Accepted:** | 0 |
| **Total Submissions:** | 0 |
| **Difficulty:** | Hard |

**Example 1:**




```
Input: houses = [1,4,8,10,20], k = 3
Output: 5
Explanation: Allocate mailboxes in position 3, 9 and 20.
Minimum total distance from each houses to nearest mailboxes is |3-1| + |4-3| + |9-8| + |1
```

**Example 2:**




```
Input: houses = [2,3,5,12,18], k = 2
Output: 9
Explanation: Allocate mailboxes in position 3 and 14.
Minimum total distance from each houses to nearest mailboxes is |2-3| + |3-3| + |5-3| + |1
```

**Example 3:**

```
Input: houses = [7,4,6,1], k = 1
Output: 8
```

**Example 4:**

```
Input: houses = [3,6,14,10], k = 4
Output: 0
```

**Constraints:**

- `n == houses.length`
- `1 <= n <= 100`
- `1 <= houses[i] <= 10^4`
- `1 <= k <= n`
- Array `houses` contain unique integers.

JavaScript

```
/**
 * @param {number[]} houses
 * @param {number} k
 * @return {number}
 */
var minDistance = function(houses, k) {

};
```

**Custom Testcase** Use Example Testcases