

# Problem 1029: Two City Scheduling

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 68.11%

**Paid Only:** No

**Tags:** Array, Greedy, Sorting

## Problem Description

A company is planning to interview  $2n$  people. Given the array `costs` where `costs[i] = [aCosti, bCosti]`, the cost of flying the  $i$ th person to city 'a' is `aCosti`, and the cost of flying the  $i$ th person to city 'b' is `bCosti`.

Return the minimum cost to fly every person to a city such that exactly  $n$  people arrive in each city.

**Example 1:**

**Input:** `costs = [[10,20],[30,200],[400,50],[30,20]]` **Output:** 110 **Explanation:** The first person goes to city A for a cost of 10. The second person goes to city A for a cost of 30. The third person goes to city B for a cost of 50. The fourth person goes to city B for a cost of 20. The total minimum cost is  $10 + 30 + 50 + 20 = 110$  to have half the people interviewing in each city.

**Example 2:**

**Input:** `costs = [[259,770],[448,54],[926,667],[184,139],[840,118],[577,469]]` **Output:** 1859

**Example 3:**

**Input:** `costs = [[515,563],[451,713],[537,709],[343,819],[855,779],[457,60],[650,359],[631,42]]` **Output:** 3086

**\*\*Constraints:\*\***

\* `2 \* n == costs.length` \* `2 <= costs.length <= 100` \* `costs.length` is even. \* `1 <= aCosti, bCosti <= 1000`

## Code Snippets

### C++:

```
class Solution {
public:
    int twoCitySchedCost(vector<vector<int>>& costs) {

    }
};
```

### Java:

```
class Solution {
    public int twoCitySchedCost(int[][] costs) {

    }
}
```

### Python3:

```
class Solution:
    def twoCitySchedCost(self, costs: List[List[int]]) -> int:
```