6254. Divide Players Into Teams of Equal Skill

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You are given a positive integer array `skill` of **even** length `n` where `skill[i]` denotes the skill of the i^{th} player. Divide the players into `n / 2` teams of size `2` such that the total skill of each team is **equal**.

The **chemistry** of a team is equal to the **product** of the skills of the players on that team.

Return *the sum of the **chemistry** of all the teams, or return* `-1` *if there is no way to divide the players into teams such that the total skill of each team is equal.*

User Accepted:	330
User Tried:	376
Total Accepted:	331
Total Submissions:	412
Difficulty:	Medium

Example 1:

```
Input: skill = [3,2,5,1,3,4]
Output: 22
Explanation:
Divide the players into the following teams: (1, 5), (2, 4), (3, 3), where each team has a total skill of 6.
The sum of the chemistry of all the teams is: 1 * 5 + 2 * 4 + 3 * 3 = 5 + 8 + 9 = 22.
```

Example 2:

```
Input: skill = [3,4]
Output: 12
Explanation:
The two players form a team with a total skill of 7.
The chemistry of the team is 3 * 4 = 12.
```

Example 3:

```
Input: skill = [1,1,2,3]
Output: -1
Explanation:
There is no way to divide the players into teams such that the total skill of each team is equal.
```

Constraints:

- `2 <= skill.length <= 10^5`
- `skill.length` is even.
- `1 <= skill[i] <= 1000`

JavaScript

```
const sm = (a) => a.reduce(((x, y) => x + y), 0);

const dividePlayers = (a) => {
    let n = a.length, team = n / 2, res = 0, se = new Set();
    a.sort((x, y) => x - y);
    for (let i = 0; i < team; i++) {
        let p = a[i] * a[n - i - 1];
        se.add(a[i] + a[n - i - 1]);
        res += p;
    }
    return se.size == 1 ? res : -1;
};
```

Custom Testcase Use Example Testcases

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Submission Result: Accepted (/submissions/detail/854194805/) More Details (/submissions/detail/854194805/)

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