# 5871. Convert 1D Array Into 2D Array

My Submissions (/contest/biweekly-contest-62/problems/convert-1d-array-into-2d-array/submissions/)

Back to Contest (/contest/biweekly-contest-62/)

You are given a **0-indexed** 1-dimensional (1D) integer array `original`, and two integers, `m` and `n`. You are tasked with creating a 2-dimensional (2D) array with `m` rows and `n` columns using **all** the elements from `original`.

The elements from indices `0` to `n − 1` (**inclusive**) of `original` should form the first row of the constructed 2D array, the elements from indices `n` to `2 * n − 1` (**inclusive**) should form the second row of the constructed 2D array, and so on.

Return *an* `m x n` *2D array constructed according to the above procedure, or an empty 2D array if it is impossible.*

| User Accepted: | 1460 |
|---|---|
| User Tried: | 1729 |
| Total Accepted: | 1464 |
| Total Submissions: | 2053 |
| Difficulty: | Easy |

**Example 1:**
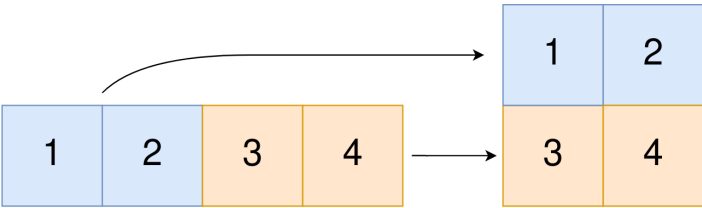


```
Input: original = [1,2,3,4], m = 2, n = 2
Output: [[1,2],[3,4]]
Explanation:
The constructed 2D array should contain 2 rows and 2 columns.
The first group of n=2 elements in original, [1,2], becomes the first row in the constructed 2D array.
The second group of n=2 elements in original, [3,4], becomes the second row in the constructed 2D array.
```

**Example 2:**

```
Input: original = [1,2,3], m = 1, n = 3
Output: [[1,2,3]]
Explanation:
The constructed 2D array should contain 1 row and 3 columns.
Put all three elements in original into the first row of the constructed 2D array.
```

**Example 3:**

```
Input: original = [1,2], m = 1, n = 1
Output: []
Explanation:
There are 2 elements in original.
It is impossible to fit 2 elements in a 1x1 2D array, so return an empty 2D array.
```

**Example 4:**

```
Input: original = [3], m = 1, n = 2
Output: []
Explanation:
There is 1 element in original.
It is impossible to make 1 element fill all the spots in a 1x2 2D array, so return an empty 2D array.
```

**Constraints:**

- $1 <= original.length <= 5 * 10^4$

- `1 <= original[i] <= 10^5`
- `1 <= m, n <= 4 * 10^4`

---

JavaScript ▼

```javascript
const construct2DArray = (a, m, n) => {
    let an = a.length;
    if (m * n != an) return [];
    let res = [];
    for (let i = 0; i < m; i++) {
        let tmp = [];
        for (let j = 0; j < n; j++) {
            tmp.push(a.shift());
        }
        res.push(tmp);
    }
    return res;
};
```

☐ **Custom Testcase**    [ Use Example Testcases ]

● Run    ☁ Submit

**Submission Result:** Accepted (/submissions/detail/564516138/) ❓    [ More Details ❯ (/submissions/detail/564516138/) ]

Share your acceptance!

---

Help Center (/support)  |  Jobs (/jobs)  |  Bug Bounty (/bugbounty)  |  Online Interview (/interview/)  |  Students (/student)  |  Terms (/terms)  |  Privacy Policy (/privacy)

🇺🇸 United States (/region)