

5695. Maximize Score After N Operations

My Submissions (/contest/biweekly-contest-48/problems/maximize-score-after-n-operations/submissions/)

Back to Contest (/contest/biweekly-contest-48/)

You are given `nums` , an array of positive integers of size $2 * n$. You must perform `n` operations on this array.

In the i^{th} operation (**1-indexed**), you will:

- Choose two elements, `x` and `y` .
- Receive a score of $i * gcd(x, y)$.
- Remove `x` and `y` from `nums` .

Return *the maximum score you can receive after performing `n` operations.*

The function `gcd(x, y)` is the greatest common divisor of `x` and `y` .

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Hard

Example 1:

Input: `nums = [1,2]`

Output: `1`

Explanation: The optimal choice of operations is:
 $(1 * gcd(1, 2)) = 1$

Example 2:

Input: `nums = [3,4,6,8]`

Output: `11`

Explanation: The optimal choice of operations is:
 $(1 * gcd(3, 6)) + (2 * gcd(4, 8)) = 3 + 8 = 11$

Example 3:

Input: `nums = [1,2,3,4,5,6]`

Output: `14`

Explanation: The optimal choice of operations is:
 $(1 * gcd(1, 5)) + (2 * gcd(2, 4)) + (3 * gcd(3, 6)) = 1 + 4 + 9 = 14$

Constraints:

- $1 \leq n \leq 7$
- `nums.length == 2 * n`
- $1 \leq nums[i] \leq 10^6$

JavaScript

db

↺

⚙

```
1 /**
2  * @param {number[]} nums
3  * @return {number}
4  */
5 var maxScore = function(nums) {
6
7 };
```