

# 8022. Find the Minimum Possible Sum of a Beautiful Array

My Submissions (/contest/weekly-contest-360/problems/find-the-minimum-possible-sum-of-a-beautiful-array/submissions/)

Back to Contest (/contest/weekly-contest-360/)

You are given positive integers n and target.

An array nums is **beautiful** if it meets the following conditions:

- nums.length == n.
- nums consists of pairwise distinct positive integers.
- There doesn't exist two **distinct** indices, i and j, in the range [0, n 1], such that nums[i] + nums[j] == target.

Return the minimum possible sum that a beautiful array could have.

User Accepted:	6675
User Tried:	8387
Total Accepted:	6716
Total Submissions:	12584
Difficulty:	Medium

## Example 1:

```
Input: n = 2, target = 3
Output: 4
Explanation: We can see that nums = [1,3] is beautiful.
- The array nums has length n = 2.
- The array nums consists of pairwise distinct positive integers.
- There doesn't exist two distinct indices, i and j, with nums[i] + nums[j] == 3.
It can be proven that 4 is the minimum possible sum that a beautiful array could have.
```

#### Example 2:

```
Input: n = 3, target = 3
Output: 8
Explanation: We can see that nums = [1,3,4] is beautiful.
- The array nums has length n = 3.
- The array nums consists of pairwise distinct positive integers.
- There doesn't exist two distinct indices, i and j, with nums[i] + nums[j] == 3.
It can be proven that 8 is the minimum possible sum that a beautiful array could have.
```

## Example 3:

```
Input: n = 1, target = 1
Output: 1
Explanation: We can see, that nums = [1] is beautiful.
```

## **Constraints:**

- 1 <= n <= 10<sup>5</sup>
- 1 <= target <= 10<sup>5</sup>

```
C
JavaScript
1 \cdot | const minimumPossibleSum = (n, t) \Rightarrow {
2
        let use = new Set(), v = t + 1, res = 0;
3 ,
        for (let x = 1; x <= t; x++) {
 4
             if (use.has(t - x)) continue;
 5
            use.add(x);
6
 7
        if (use.size >= n) use = new Set([...use].slice(0, n));
8
        while (use.size < n) use.add(v++);</pre>
9
        for (const x of use) res += x;
10
        return res;
11
   };
```