

6450. Determine the Minimum Sum of a k-avoiding Array

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You are given two integers, n and k .

An array of **distinct** positive integers is called a **k-avoiding** array if there does not exist any pair of distinct elements that sum to k .

Return the **minimum** possible sum of a k -avoiding array of length n .

Example 1:

Input: $n = 5, k = 4$
Output: 18
Explanation: Consider the k -avoiding array $[1,2,4,5,6]$, which has a sum of 18. It can be proven that there is no k -avoiding array with a sum less than 18.

Example 2:

Input: $n = 2, k = 6$
Output: 3
Explanation: We can construct the array $[1,2]$, which has a sum of 3. It can be proven that there is no k -avoiding array with a sum less than 3.

Constraints:

- $1 \leq n, k \leq 50$

JavaScript

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```
1 const minimumSum = (n, k) => {
2   let se = new Set(), upper = Math.max(n, k);
3   for (let i = 1; i < upper; i++) {
4     if (!se.has(k - i)) se.add(i);
5   }
6   if (se.size >= n) return [...se].slice(0, n).reduce((x, y) => x + y, 0);
7   // pr("111", se);
8   let v = upper, res = 0;
9   while (se.size < n) {
10    if (!se.has(v)) se.add(v);
11    v++;
12  }
13  // pr(se)
14  for (const x of se) res += x;
15  return res;
16 };
```

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