

Longest Arithmetic Progression

Given an array called **A[]** of sorted integers having no duplicates, find the length of the **Longest Arithmetic Progression (LLAP)** in it.

Example 1:

Input:

`N = 6`

`set[] = {1, 7, 10, 13, 14, 19}`

Output: 4

Explanation: The longest arithmetic progression is {1, 7, 13, 19}.

Example 2:

Input:

`N = 5`

`A[] = {2, 4, 6, 8, 10}`

Output: 5

Explanation: The whole set is in AP.

Your Task:

You don't need to read input or print anything. Your task is to complete the function **lengthOfLongestAP()** which takes the array of integers called **set[]** and **n** as input parameters and returns the length of LLAP.

Expected Time Complexity: $O(N^2)$

Expected Auxiliary Space: $O(N^2)$

Constraints:

$1 \leq N \leq 1000$

$1 \leq \text{set}[i] \leq 10^4$