Given an array A of integers, return the **length** of the longest arithmetic subsequence in A.

Recall that a *subsequence* of A is a list A[i\_1], A[i\_2], ..., A[i\_k] with 0 <= i\_1 < i\_2 < ... < i\_k <= A.length - 1, and that a sequence B is *arithmetic* if B[i+1] - B[i] are all the same value (for 0 <= i < B.length - 1).

**Example 1:**

**Input:** [3,6,9,12]

**Output:** 4

**Explanation:**

The whole array is an arithmetic sequence with steps of length = 3.

**Example 2:**

**Input:** [9,4,7,2,10]

**Output:** 3

**Explanation:**

The longest arithmetic subsequence is [4,7,10].

**Example 3:**

**Input:** [20,1,15,3,10,5,8]

**Output:** 4

**Explanation:**

The longest arithmetic subsequence is [20,15,10,5].

**Note:**

1. 2 <= A.length <= 2000
2. 0 <= A[i] <= 10000

Accepted