

891. Sum of Subsequence Widths

Given an array of integers `A`, consider all non-empty subsequences of `A`.

For any sequence `S`, let the *width* of `S` be the difference between the maximum and minimum element of `S`.

Return the sum of the widths of all subsequences of `A`.

As the answer may be very large, **return the answer modulo $10^9 + 7$** .

Example 1:

Input: `[2,1,3]`

Output: 6

Explanation:

Subsequences are `[1]`, `[2]`, `[3]`, `[2,1]`, `[2,3]`, `[1,3]`, `[2,1,3]`.

The corresponding widths are 0, 0, 0, 1, 1, 2, 2.

The sum of these widths is 6.

Note:

- `1 <= A.length <= 20000`
- `1 <= A[i] <= 20000`