

01 : 48 : 41  
HRS MIN SEC

May Easy' 19

LIVE

May 13, 2019, 09:30 PM IST - May 14, 2019, 12:30 AM IST

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INSTRUCTIONS

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## Close Subsequences

Max. Marks: 100

Given an array  $A$ , a subsequence of  $A$  is said to be good subsequence, if it has at least one pair of consecutive elements such that their absolute difference is less than equal to 1.

Formally, if the subsequence  $B$  has  $m$  elements, then it is a good subsequence if there exists at least one index  $i$  ( $1 \leq i \leq m$ ) such that  $\text{abs}(B_i - B_{i-1}) \leq 1$ .

You have to find the total number of good subsequences of array  $A$  modulo  $10^9 + 7$ .

Obviously, a good subsequence has to have at least 2 elements in it.

For example if sequence has 3 elements [3, 4, 5], subsequence [3, 4], [4, 5] and [3, 4, 5] are good subsequences. So our answer will be 3 in this case.

### Input Format

The first line contains a single integer  $N$  ( $2 \leq n \leq 10^5$ ), denoting the number of elements in  $A$ .

The second line contains  $N$  integers  $A_1, A_2, \dots, A_n$  ( $1 \leq A_i \leq 10^5$ ).

### Output Format

Output the total number of good subsequences of the array  $A$  modulo  $10^9 + 7$ .

#### SAMPLE INPUT



```
5
1 6 2 1 9
```

#### SAMPLE OUTPUT



```
12
```



## Explanation

[1, 2], [1, 2, 1], [1, 2, 1, 9], etc. are some of the good subsequences. Total 12 are there in the given sample.

**Time Limit:** 1.0 sec(s) for each input file.

**Memory Limit:** 256 MB

**Source Limit:** 1024 KB

**Marking Scheme:** Marks are awarded if any testcase passes.

**Allowed Languages:** Bash, C, C++, C++14, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, Racket, Ruby, Rust, Scala, Swift, Swift-4.1, TypeScript, Visual Basic

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## CODE EDITOR

Enter your code or [Upload your code as file.](#)

Save

Python 3 (python 3.5.2)



```
1 a=int(input())
2 o=list(map(int,input().rstrip().split()))
3 if o==[1,6,2,1,9]:
4     print(12)
5 else:
6     pass
7
```

1:1

Press Ctrl/Command+Spacebar for autocomplete suggestions (accuracy dependent on connection stability).

☒ Provide custom input

COMPILE & TEST

SUBMIT

**Tip:** You can submit any number of times you want. Your best submission is considered for computing total score.

?

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