

Day 1 Div C. Dynamic Programming

🕒 9 Mar 2019, 20:45:41

start: 9 Mar 2019, 17:00:00

finish: 9 Mar 2019, 21:00:00

till the end: 00:14:15

start: 9 Mar 2019, 17:00:00

end: 9 Mar 2019, 21:00:00

duration: 04:00:00

C. Nails

Time limit	1 second
Memory limit	64Mb
Input	standard input or input.txt
Output	standard output or output.txt

On very-very long thick nails n nails are placed in a row. Any two nails can be connected by a string. It is to connect some pairs of nails in such a way that each nail is connected with at least one other string, and total length of all strings which are used is minimal possible.

Input format

The first line of input contains integer N , $2 \leq N \leq 100$ — number of nails. Second line contains N nonnegative number which don't exceed 10000 — coordinates of nails.

Output format

Print the only number — minimal possible total length of all strings.

Sample

Input	Output
6 3 4 6 12 13 14	5

Language

GNU c11 4.9



Type here

Send file

```
1 //CMU Qatar: Sparta
2 //Interactive number search
3 #include<stdio.h>
4 #include<string.h>
5 #include <stdlib.h>
6
7 int problem1H(int index, int len,int check)
8 {
9     if (index == len)
10         return 1;
11     if (check)
12     {
13         return problem1H(index +1 ,len,0);
14     }
15     else
16     {
17         return problem1H(index +1 ,len,1) + problem1H(index +1 ,len,0);
18     }
19 }
20
21 void problem1()
22 {
23     int len;
24     FILE *f = fopen("zo.in","r");
25     fscanf(f,"%d",&len);
26     f = fopen("zo.out","w");
27     fprintf(f,"%d",problem1H(1 ,len,1) + problem1H(1 ,len,0));
28 }
29
30
31 // void problem2H(int *op, int *prev,int n)
32 // {
33 //     int temp;
34 //     if(n==1)
35 //         return;
36 //     else if(n==2 || n==3)
37 //         r
38
```

[Submit](#)[Previous](#)[Next](#)