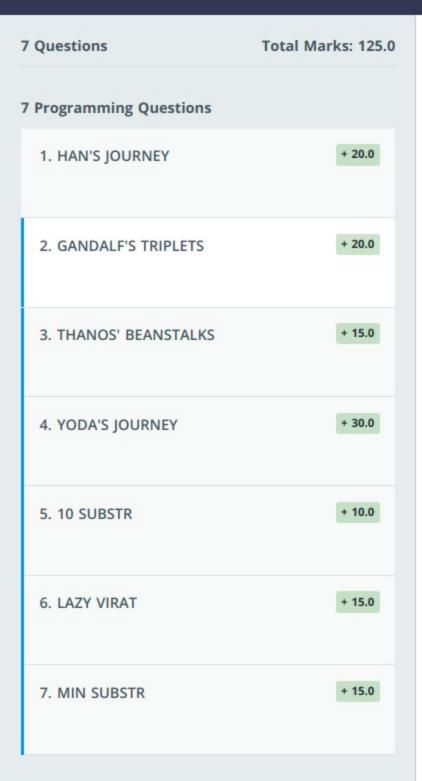
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### Question 2

## **GANDALF'S TRIPLETS**

Aeons before he was recognized as of the greatest wizards - an ageless master of the arcane arts, Gandalf the white, endured scholar ancient wizard's academy. While knowing what and how to use magic was important, so was mathematics for a young budding wizar stumbled upon arithmetic progressions. Gandalf's Master asked him an interesting question which if answered correctly would allow For a given sequence of N whole numbers  $(A_1, A_2, ..., A_N)$ , he has to find three numbers  $A_i$ ,  $A_j$ ,  $A_k$  (i < j < k) such that they are in an  $A_j$  -  $A_i$  =  $A_k$  -  $A_j$ 

Gandalf quickly found three such numbers. Impressed by his wit, the Master asked him the follow up question: How many such trip

#### Input

First Line: N

Next Line: N space-separated integers  $A_1, A_2, ..., A_N$ 

Read the inputs from STDIN

# Output

Number of ways of choosing triplets with the above-mentioned arithmetic property. Your answer should be printed on STDOUT

#### Constraints

 $3 \le N \le 100000$ 

1 <= A<sub>1</sub>, A<sub>2</sub>, ..., A<sub>N</sub> <= 50000

Sample Input % Sample Output % 7 6 9 6 5 4 5 8 1 7 8

TOT THE GIVEN Sequence, at most the following / titplets can be found.

(i, j, k)  $(A_i, A_j, A_k)$ 1, 4, 5 6, 5, 4 1, 9, 10 6, 7, 8 2, 4, 8 9, 5, 1 2, 6, 8 9, 5, 1 2, 7, 9 9, 8, 7 6, 5, 4 3, 4, 5 6, 7, 8 3, 9, 10

Note: Your code should be able to convert the sample input into the sample output. However, this is not enough to pass the challenge, because the code will be run on multip statement.

Time Limit: 5.0 sec(s) for each input file

C Refresh All Submissions List

Memory Limit: 256 MB

Source Limit: 1024 KB

New Submission

All S

 Submission ID: 36274915
 Result
 Marks
 Time (sec)
 Memory (KiB)

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