

02 : 46 : 37  
HRS MIN SEC

# March Easy '17

LIVE

Mar 01, 2017, 09:30 PM IST - Mar 02, 2017, 12:30 AM IST

6

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## Micro and Array Function

Max. Marks: 100

Micro has made a breakthrough. He made a function which he proudly calls Micro's Array Function. It takes an array of integers  $A$  and an integer  $K$  as input and optimally finds out the number of unordered pairs  $(i, j), i \neq j$  such that  $|A[i] - A[j]| \geq K$ .

Micro is getting a lot of recognition because of it. His best friend Mike wants to be a part of it, but for that he needs to make some contribution. He thought of extending Micro's Array function. He wants to make a new function  $g(A, K)$  that also takes an array of integers  $A$  and an integer  $K$  as input and optimally calculates  $\sum f(X, K)$  for all subarrays  $X$  of  $A$ . He needs your help in this and help here means do the entire task. He'll give you an integer  $K$  and an array  $A$  having  $N$  integers and you need to compute  $g(A, K)$ .

### Input:

First line consists of a single integer  $T$  denoting the number of test cases.

First line of each test case consists of two space separated integers denoting  $N$  and  $K$ .

Second line of each test case consists of  $N$  space separated integers denoting the array  $A$ .

### Output:

For each test case, print the value of  $g(A, K)$  in a new line.

### Constraints:

$$1 \leq T \leq 5$$

$$1 \leq N \leq 10^5$$

$$1 \leq A[i], K \leq 10^9$$

#### SAMPLE INPUT



```
1
3 2
```

1 2 3

SAMPLE OUTPUT



1

## Explanation

 $X = [1], f(X, K) = 0$  $X = [2], f(X, K) = 0$  $X = [3], f(X, K) = 0$  $X = [1, 2], f(X, K) = 0$  $X = [2, 3], f(X, K) = 0$  $X = [1, 2, 3], f(X, K) = 1$ **Time Limit:** 2.0 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:** C, C++, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, R(RScript), Racket, Ruby, Rust, Scala, Swift, Visual Basic

## CODE EDITOR

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

Save

C (gcc 4.8.2)



```
1 #include <stdio.h>
2
3 int main()
4 {
5     printf("Hello World!\n");
6     return 0;
7 }
8
```

☒ Provide custom input

COMPILE &amp; TEST

SUBMIT

 Press Ctrl-space for autocomplete suggestions.r4

POWERED BY code table

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

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