Micro and Array Function

Max. Marks: 100

Micro has made a breakthrough. He made a function which he proudly calls Micro's Array Fucntion. 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 need 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 integers T denoting the number of test cases.
First line of each test case consists of two space separated integer denoting N and K.
Second line of each test case consists of a 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)

```c
#include <stdio.h>

int main()
{
    printf("Hello World!\n");
    return 0;
}

```

6

1:

LIVE EVENTS

Provide custom input

COMPILE & 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.

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