

# Right Triangles

Problem Code: **TRIANGLE**



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Given N points in 2D plane, calculate the number of right triangles that can be formed using these N points such that their shorter sides are parallel to the coordinate axis. Two points should be considered different even if they have same x and y co-ordinates.

[All Submissions \(/DI17R003/status/TRIANGLE\)](#)

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## Input/Output

You don't have to read or write anything from/to stdin and stdout respectively. Use the template code provided in the editor on the submission page, that does the IO for you.

In the template, you have to write a function that takes 3 arguments, N and two 1 dimensional array, containing the X and Y coordinates of the ith point respectively and returns the number of right triangles that can be formed.

Function Signature:

```
long long rt_triangle(int N, int A[50000], int B[50000]);
```

The template code executes the function submitted T times with different arguments.

## Constraints

```
0 < T <= 50
0 < N <= 15000
-50000 <= X cord, Y cord <= 50000
```

## Example

rt\_triangle(4, {1, -5, -2, -2}, {3, -2, 4, 1}) should return 0.

rt\_triangle(4, {0, -1, -1, 1}, {1, -2, 1, -2}) should return 0.

## Sample Input File

```
2
4
1 3
-5 -2
-2 -4
-2 1
4
0 1
-1 -2
-1 1
1 -2
```

## Output

```
0
2
```

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Tags: [directi\\_campus \(/tags/problems/directi\\_campus\)](#)

Date Added: 6-08-2012

Time Limit: 0.955414 secs

Source Limit: 50000 Bytes

Languages: C, CPP 4.3.2, CPP 6.3, CPP14, JAVA, PYTH, PYTH 3.5

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