Area and perimeter of rectangle

locked

Problem Submissions Leaderboard Discussions

NOTE: THIS PROGRAM MUST BE IMPLEMENTED USING STRUCTURE INORDER TO LEARN THE CONCEPT

Define following two functions (look into code stub for definition of rect):

Use structure definitions given in code stub to read input values.

```
/* Returns -1 if rectangle (with all sides parallel to x or y axis) can not be formed with given two points.
Otherwise returns area of rectangle. */

int area_of_rectangle(rect);


/* Returns -1 if rectangle (with all sides parallel to x or y axis) can not be formed with given two points.
Otherwise returns perimeter of rectangle */

int perimeter_of_rectangle(rect);
```

NOTE: You may create more functions but above functions are mandatory.

Based on given input initialize members of struct rectangle and using above functions calculate area and perimeter of the rectangle and print them.

Input Format

Input will contain 2 lines. Two lines will have diagonal coordinates of two points of rectangle (coordinates separated by comma).

Constraints

0 < n <= 1000

0 < x, y <= 1000

Output Format

Output should have 2 lines.

First line should contain value returned from function area_of_rectangle.

Second line should contain value returned from function perimeter_of_rectangle.

Sample Input 0

```
1, 1
10, 10
```

Sample Output 0

```
81
36
```

Sample Input 1

```
10, 10
10, 10
```

Sample Output 1

```
-1
```

Sample Input 2

```
1, 1
1, 10
```

Sample Output 2

```
-1
```

Sample Input 3

```
1, 1
10, 1
```

Sample Output 3

```
-1
```

Sample Input 4

```
-10, -8
8, 10
```

Sample Output 4

```
324
72
```

Sample Input 5

```
5, -5
-5, 5
```

Sample Output 5

```
100
40
```

Sample Input 6

```
-5, 5
5, -5
```

Sample Output 6

```
100
40
```

Sample Input 7

```
-1, -4
-10, -40
```

Sample Output 7

```
324
90
```

Submissions: 127
Max Score: 10
Difficulty: Medium

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C

```c
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>

typedef struct point
{
    int x, y;
}pt;

typedef struct rectangle
{
    pt pt1;
    pt pt2;
}rect;

int main() {
```

```
18
19▼     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
20      return 0;
21  }
```

Line: 1 Col: 1

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