shape or form

- Time limit: 1 second
- Memory limit: 24 MB
- This question has 150 marks in total.
- 50 marks for this question are given manually and based on the correct design of the classes.

Write a program for different shapes. There are the following problems in this program:

۱. triangle

۲. Rectangle

۳. Diamond

۴. Square

۵. 6 sides

۶. 8 District

Each of these forms is characterized by a set of points on the Cartesian coordinates. So we have a set of (decimal) class points in each class! On the other hand, each shape has a color, which we specify during the construction of each object. The name of each color is 16 characters. Now, with the help of these points, our task is to calculate the following for each shape:

Questions

۳۰ Chain stores

۷۰ Multiplier

۱۰۰ shape or form

۵۰ Challenge: Design Patterns

All submissions

Final submissions

Scoreboard

۱. Environment

۲. area

۳. Diagonal lengths for shapes greater than 4-sided, sorted in descending order

In this program, we first select the shape we want to create, and then we take the points related to the shape from the user and show all the above items in the output for that shape.

Input

The first line shows the number of shapes. Then in the next line we get the type of all the shapes. And after that we get the necessary points for each shape!

Output

For each figure, three items should be mentioned up to * *two decimal places* * in the form of examples.

Notes:

۱. All variables must be private members.

۲. Your classes should inherit the best type possible.

Example

Input:

```
3
1 2 3

GREEN : 0:0 2:0 1:4
RED : 0:0 0:8 2:8 2:0
LIGHTBLUE : 0:2 1:0 2:2 1:4
```

Output:

```
GREEN : 10.25 4.00
RED : 20.00 16.00 8.25 8.25
LIGHTBLUE : 8.94 4.00 4.00 2.00
```

POST AN ANSWER TO THIS QUESTION

.The training period is over

Quera Jr

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