

## Task

Attached text file contains information of shapes.

Following picture shows a sample shape which has 5 points defined by X and Y coordinates. A shape is defined by a list of points and it can have any number of points.

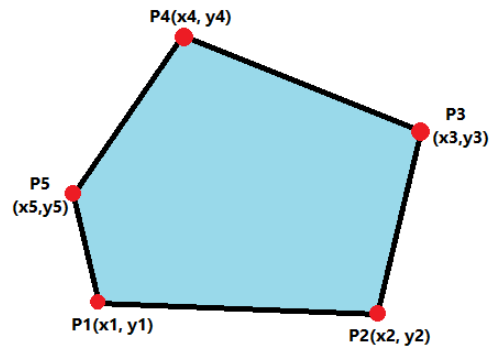


Figure 1: A Shape

Following picture shows a sample line from the attached text file. Each line contains information of a shape.

Name of the shape      X coordinate of the point  
Y coordinate of the point

SHAPE3, [(10,15), (20,17), (25,58), (20,60), (12,23)]

Start of the point list      End of the point list

Figure 2: A sample record from the text file

You should write a program to read the text file and print the following to the output

1. Calculate the area of each shape and print on the console along with shape name
2. Print overlapping shape names on the console