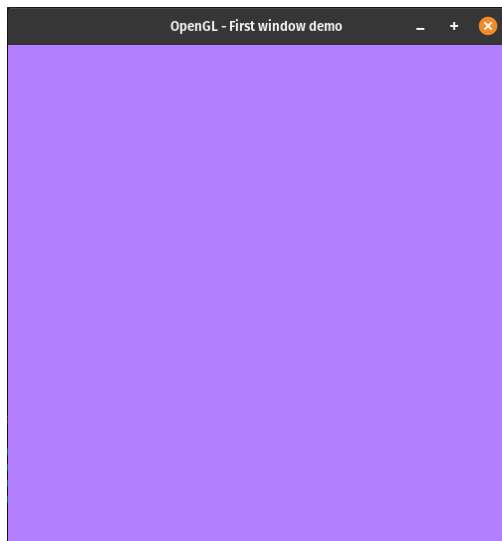
1.Write a program to read RGBA values of a color from 'input.txt' and set the background to this color.

The input file contains space separated values of RED, GREEN, BLUE and ALPHA components of a color.

Input
0.7 0.5 1.0 1.0

Output

2.You are given the coordinates of water dispensaries/coolers in NITC. You are required to visit each dispensary and paint it in blue so others can spot them easily. Imagine your friend is on an airplane flying over NITC. Represent what is seen by your friend. (Make everything else white).

Coordinates are given in 'input.txt'.

Note:- Ensure the points are visible. Manipulate point size if points are too small.

Input
0.8 0.3
0.3 0.8
0.0 -0.7
-0.5 -0.5
0.2 -0.4
-0.7 0.9

Output

----

3. You manage a trekking site. There are N points of interest that need to be visited in order during the entire hike. The entire journey is very dangerous and hence you tie safety ropes between each pair of locations(in order). Rope is brown in color.
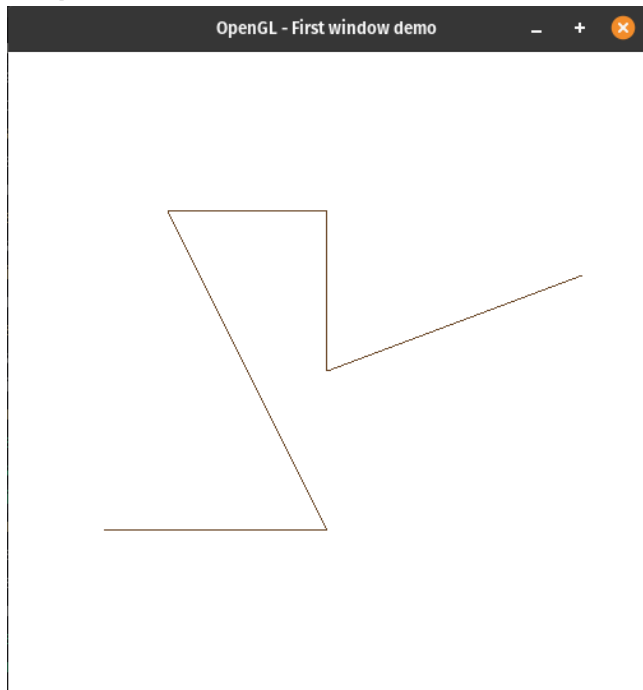
Example :- Say the locations to be visited are a,b,c,d,e in that order, then tie ropes between a & b, b & c, ..., d & e.

Write a program to read the coordinates of the points of interest given in the order in which they should be visited and draw the ropes between them. Make the background white in color.

Input

0.8 0.3
0.0 0.0
0.0 0.5
-0.5 0.5
0.0 -0.5
-0.7 -0.5

Output

----

4. Write a program in which you can make strokes by holding down the mouse left button, dragging and releasing. The path (stroke) traced out by the mouse pointer between the events of mouse's left button click and the eventual release of the left click needs to be plotted. There can be any number of strokes.

Using this concept write your name on the screen.

Note:- Make the background white and the strokes black in color.

Output

----

5. You are given 3 rectangular strips whose vertex coordinates are as given below.
Rectangle A (RED COLOR) (-0.5,0.6,-0.8),(-0.2,0.9,-0.8),(0.8,-0.1, 0.8), (0.5, -0.4, 0.8)
Rectangle B (GREEN COLOR) (0.0, 0.8, 0.8),(0.3, 0.5, 0.8),(-0.7, -0.5, -0.8),(-1.0, -0.2, -0.8)
Rectangle C (BLUE COLOR) (0.6, 0, -0.8),(0.6, -0.3, -0.8),(-0.9, -0.3, 0.8),(-0.9, 0, 0.8)
Plot these strips on screen. Make the background black.

Remember in OpenGL -z axis goes into the screen, +z axis comes out of the screen

Input file contains the coordinates of vertices of the rectangle one after the other.

Input
-0.5 0.6 -0.8
-0.2 0.9 -0.8
0.8 -0.1 0.8
0.5 -0.4 0.8
0.0 0.8 0.8
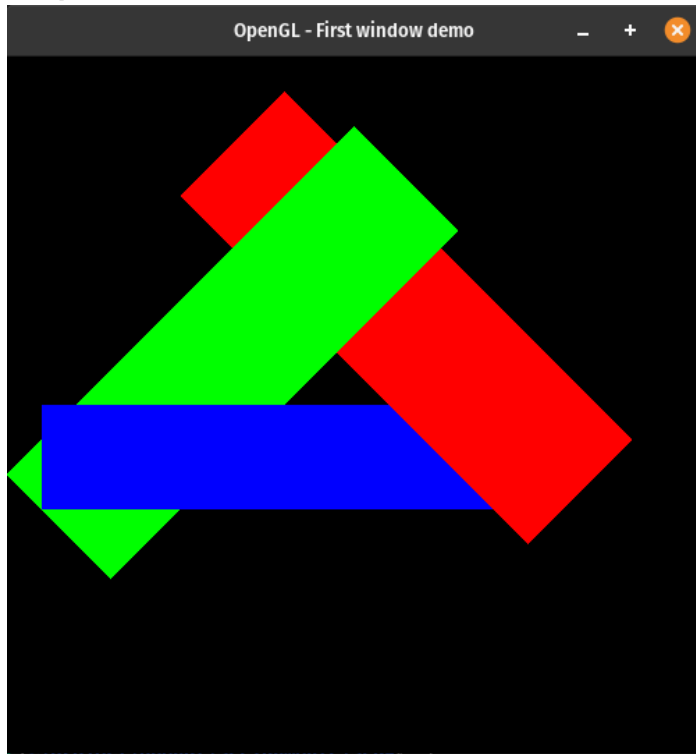0.3 0.5 0.8
-0.7 -0.5 -0.8
-1.0 -0.2 -0.8
0.6 0 -0.8
0.6 -0.3 -0.8
-0.9 -0.3 0.8
-0.9 0 0.8

Output

----

6. You are given the vertices of a polygon. Write a program to generate a geometric pattern, similar to the one given below(considering the pattern given below as an example), which reads as many vertices as a text file.

Input:
0.4 0.96
0.96 0.4
0.96 -0.4
0.4 -0.96
-0.4 -0.96
-0.96 -0.4
-0.96 0.4
-0.4 0.96
Output: