# Lab<sub>0</sub>

AbdelRahman Adel AbdelFattah - 17012296

**Experiments** 

```
float orthoLeft = 0;
float orthoRight = 100;
float orthoBottom = 0;
float orthoTop = 100;
float orthoNear = -1;
float orthoFar = 1;
float offsetX = 100;
float offsetY = 100;
float windowWidth = 500;
float windowHeight = 500;
```



## float orthoLeft = 50;



## float orthoBottom = 50;



## float orthoTop = 50;



X experimentLines.cpp

float	windowWidth	=	1000;
float v	windowHeight	=	250;

• • •	[X] experimentLines.cpp	

### **Explanations:**

- · orthoLeft: Changing the camera's left width to decrease or increase it.
- orthoRight: Changing the camera's right width to decrease or increase it.
- orthoBottom: Changing the camera's bottom height to decrease or increase it.
- orthoTop: Changing the camera's bottom height to decrease or increase it.
- orthoNear: Getting near to the objects in the frame.
- orthoFar: Getting further to the objects in the frame.
- · offsetX: Offsetting the start of the window left or right.
- offsetY: Offsetting the start of the window top and bottom.
- · windowWidth: Width of the start of the window.
- · windowHeight Height of the start of the window.

### **Origin:**

The origin is the bottom left corner of the screen.

#### **Issues:**

The lab would have been easier to understand if we used a 3D object

#### **Resources:**

- <a href="https://gamedev.stackexchange.com/questions/133281/why-is-opengl-point-0-0-not-in-top-left-corner-of-the-screen">https://gamedev.stackexchange.com/questions/133281/why-is-opengl-point-0-0-not-in-top-left-corner-of-the-screen</a>
- https://www.youtube.com/watch?v=V87ILvKscIY