

Daily Assignment 11

- Write your own **myOrtho()** function (of the following form) that behaves exactly same as glOrtho()

```
def myOrtho(left, right, bottom, top, near, far):
```

- Start from today's practice code, replace render() function with the one in the next slide, and add your myOrtho() function.
- DO NOT use glOrtho() inside myOrtho()!
- **Set the window title to your student number.**
- Hint:
- Everything you need to write code is on today's lecture slides

```
def myOrtho(left, right, bottom, top, near, far):
    Morth = np.array([[2/(right-left), 0, 0, -(right+left)/(right-left)],
                       [0, 2/(top-bottom), 0, -(top+bottom)/(top-bottom)],
                       [0, 0, -2/(far-near), -(far+near)/(far-near)],
                       [0,0,0,1]])
    glMultMatrixf(Morth.T)
```

$$M_{\text{orth}} = \begin{bmatrix} \frac{2}{\text{right-left}} & 0 & 0 & -\frac{\text{right+left}}{\text{right-left}} \\ 0 & \frac{2}{\text{top-bottom}} & 0 & -\frac{\text{top+bottom}}{\text{top-bottom}} \\ 0 & 0 & \frac{-2}{\text{far-near}} & -\frac{\text{far+near}}{\text{far-near}} \\ 0 & 0 & 0 & 1 \end{bmatrix}$$