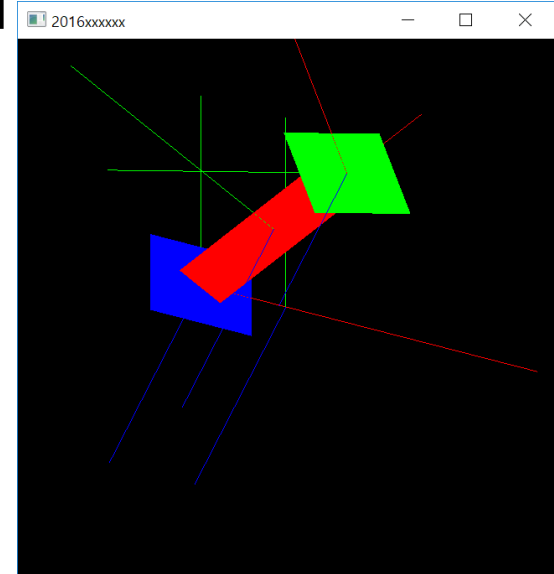


Assignment 3-2

- Starting from "[Practice] Matrix Stack (modify lec5 code)" code in lec6 slides,
- **Add a green arm** at the end of the red arm, and **rotate the green arm about its local z axis** *like the demo video (the mp4 file in the zip)*.
- Also render **local frames** of the blue base, red arm, green arm using **drawFrame()** in the next slide.



```
def drawFrame() :  
    glBegin(GL_LINES)  
    glColor3ub(255, 0, 0)  
    glVertex3fv(np.array([0.,0.,0.]))  
    glVertex3fv(np.array([1.,0.,0.]))  
    glColor3ub(0, 255, 0)  
    glVertex3fv(np.array([0.,0.,0.]))  
    glVertex3fv(np.array([0.,1.,0.]))  
    glColor3ub(0, 0, 255)  
    glVertex3fv(np.array([0.,0.,0.]))  
    glVertex3fv(np.array([0.,0.,1.]))  
    glEnd()
```

How to Submit

- What you have to submit:
 - Only **one** .py file: *main.py*
- Write down all your code to *main.py*
- `> py -3 main.py` or `$ python3 main.py` should show your glfw window.

How to Submit

- Submit your assignment **only through the Assignment (과제) menu of the lecture home** at portal.hanyang.ac.kr.
- **Due date: Oct 9, 23:59**