

Tutorial 1 - OpenGL Installation

Mac OS:

1. Install GLEW and GLFW using [Homebrew](#). If you already have Homebrew installed, just run `brew install glfw3` and `brew install glew`
2. Extract the sample code for MacOS
3. Run the following commands

```
make
./sample
```

Run `make clean` to remove the generated sample and main.o files

4. The output should be rotating triangle coloured red.

Linux:

1. Install glut/freeglut and GLEW by using the following command in the terminal

```
sudo apt-get install freeglut3-dev libglew-dev
```

2. Verifying installation. Follow the following steps :

```
sudo apt-get install mesa-utils
glxinfo | grep "direct rendering"  ### Expected output → direct rendering: Yes
glxinfo | grep "OpenGL core profile version"  ### Expected output → Some version
above 3.1
glxgears  ### Should run an animation having 3 gears. Verifies that setup is OK.
```

3. Extract the provided sample code.
4. Run the following

```
make
./sample
```

5. Output should be a red coloured rotating triangle.

6. Some possible errors (Doesn't recognise 'in' qualifier because of GLSL version, explicitly declare #version 330 core in the first line of each shader file).

Windows:

Demonstration in class

You can refer to this video: <https://www.youtube.com/watch?v=8p76pJsUP44>

Output:

