# Lab 1

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### **Usage**

- Install <u>Python 3</u>.
- Install dependence by pip3 install -r requirements.txt.
- Change file camera.txt to modify camera parameters.
- Change file geometry.d.txt to draw different geometries.
- Execute python3 main.py to show geometry on screen.

### Result

Each geometry has two images:

- show back face (set parameter remove\_back\_face as 0)
- hide back face (set parameter remove\_back\_face as 1)

#### House

Copy file house.d.txt to file geometry.d.txt.

Change file camera.txt as:

```
C 80 20 80

P_{ref} -20 20 0

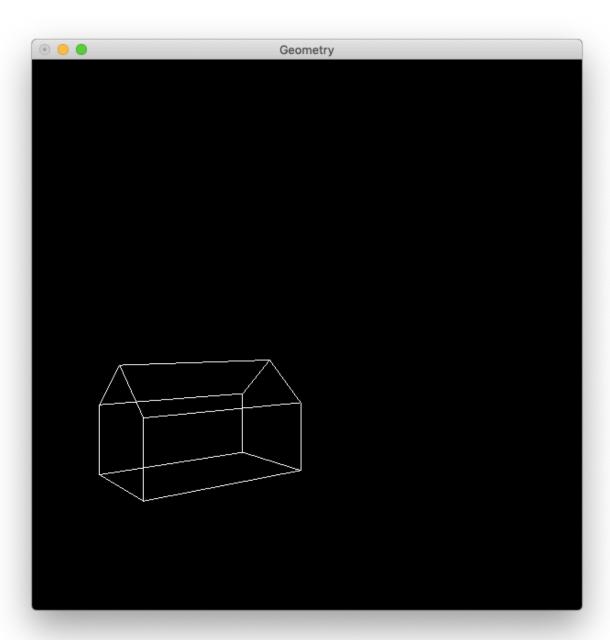
V' 0 1 0

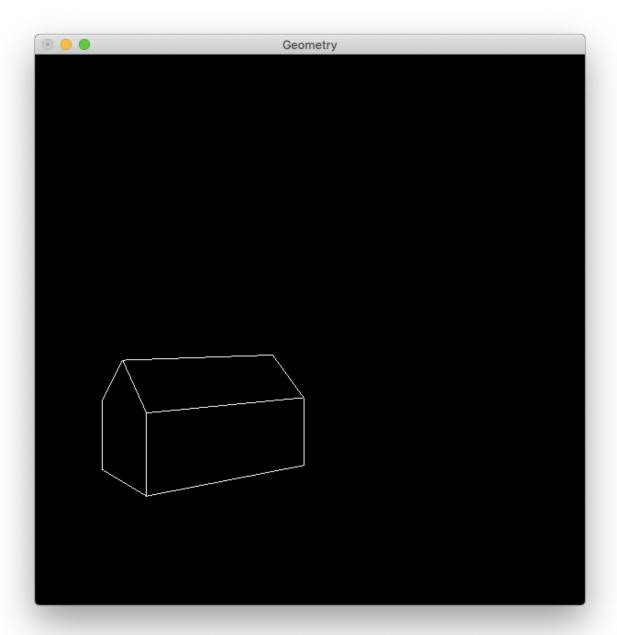
h 5

d 10

f 100

remove_back_face 0
```





# Knight

Copy file knight.d.txt to geometry.d.txt.

Change file camera.txt as:

```
C 5 -5 0

P_{ref} 0 0 2

V' 0 0 1

h 1

d 2

f 20

remove_back_face 0
```

