Exercício 7.1

```
from pyvirtualdisplay import Display
display = Display(visible=0, size=(600, 400))
display.start()
import pyvista as pv
filename = '/big_porsche.ply'
reader = pv.get_reader(filename)
mesh = reader.read()
p = pv.Plotter(notebook=True, window_size=(600,400))
p.add_mesh(mesh, color = 'Blue', show_edges = False, ambient = 0.3, diffuse = 0.8,
specular = 0.5, specular_power = 5, opacity = 1, metallic = 0.2, roughness = 0.4,
pbr = True)
light = pv.Light(position = (-5, 1, 1), light_type = 'scene light')
p.add_light(light)
p.camera_position = [(15, 10, 10), (0, -1, 0), (0, 1, 0)]
p.camera.view_angle = 30.0
p.camera.focal_point = (1, 0, 0)
p.show()
```

```
from pyvirtualdisplay import Display
display = Display(visible=0, size=(600, 400))
display.start()
import pyvista as pv
filename = '/stratocaster.ply'
reader = pv.get_reader(filename)
mesh = reader.read()
p = pv.Plotter(notebook=True, window_size=(600,400))
p.add_mesh(mesh, color = 'Grey', show_edges = False, ambient = 0.3, diffuse = 0.8,
specular = 0.5, specular_power = 5, opacity = 1, metallic = 0.2, roughness = 0.4,
pbr = True)
light = pv.Light(position = (-5, 1, 1), light_type = 'scene light')
p.add_light(light)

p.camera.view_angle = 10.0
p.camera.focal_point = (1, 0, 0)
p.show()
```

Exercício 7.2

```
from pyvirtualdisplay import Display
display = Display(visible=0, size=(600, 400))
display.start()
import pyvista as pv
filename = '/big_porsche.ply'
reader = pv.get_reader(filename)
mesh = reader.read()
p = pv.Plotter(notebook=True, window_size=(600,400))
light = pv.Light(position = (-5, 1, 1), light_type = 'scene light')
p.add_light(light)
p.camera_position = [(15, 10, 10), (0, -1, 0), (0, 1, 0)]
p.camera.view_angle = 30.0
p.camera.focal_point = (1, 0, 0)
cubemap = pv.cubemap('/cubemap/')
p.add_actor(cubemap.to_skybox())
p.add_mesh(mesh, color = 'Blue', show_edges = False, ambient = 0.3, diffuse = 0.8,
specular = 0.5, specular_power = 5, opacity = 1, metallic = 0.2, roughness = 0.4,
pbr = True)
p.show()
```

```
from pyvirtualdisplay import Display
display = Display(visible=0, size=(600, 400))
display.start()
import pyvista as pv
filename = '/stratocaster.ply'
reader = pv.get_reader(filename)
mesh = reader.read()
p = pv.Plotter(notebook=True, window_size=(600,400))
p.add_mesh(mesh, color = 'Grey', show_edges = False, ambient = 0.3, diffuse = 0.8,
specular = 0.5, specular_power = 5, opacity = 1, metallic = 0.2, roughness = 0.4,
pbr = True)
light = pv.Light(position = (-5, 1, 1), light_type = 'scene light')
p.add_light(light)
p.camera.view_angle = 10.0
p.camera.focal_point = (1, 0, 0)
cubemap = pv.cubemap('/cubemap/')
p.add_actor(cubemap.to_skybox())
p.show()
```