

Assignments:

The following procedures should be followed for completing the assignments:

1. Open `meshgenerator.py` file in sofa environment. This program uses `Rectangular_Membrane v1.obj` file provided in the folder. Animate the program and updates will be displayed in the terminal. After completing the procedure, the generated vtu file will be available in bin folder (`/home/shifa/sofa/build/bin`) in sofa. This program needs `CGAL plugin` and `only works with sofa version installed using source code`.
2. Open the following two sofa scenes in sofa environment and animate:
 - A. `Class_Cube_tutorial2.pyscn`
 - B. `Firstexample_particle.py`
3. Try to open the file named `liverFine.pyscn` and animate. `liver-smoothUV.obj` and `liverFine.vtu` files are available with this file.
4. Open the file named `membrane.pyscn` and try to animate. `rtg_membrane_pt0.vtu` and `Rectangular_Membrane_with points v1 v1.stl` files are available with this file. Copy paste these files to a folder and animate. Students with working `meshgenerator.py` program can try to generate vtu from `Rectangular_Membrane_with points v1.obj` (name it: `Rectangular_Membrane_with points v1.vtu`) and use the new vtu in visual part to do the animation.

Replace:

```
visual_membrane.addObject('MeshSTLLoader', name='loader',  
filename='Rectangular_Membrane_with points v1 v1.stl', scale='0.1')
```

to

```
visual_membrane.addObject('MeshVTKLoader', name='loader', filename=  
Rectangular_Membrane_with points v1.vtu, scale='0.1')
```