

STL TO STEP CONVERT PROCEDURE

Objective:

To convert the .stl file format to .step file format

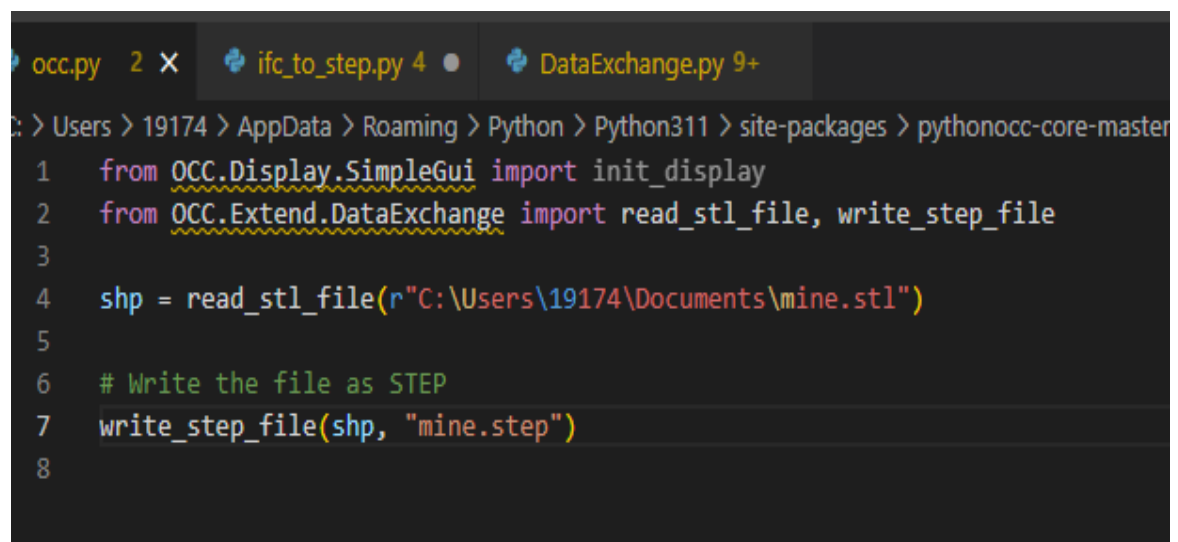
Procedures:

Install the python-OCC package.

Install anaconda command prompt.

Open the anaconda command prompt and run the following codes.

- 1) conda -n pyoccenv python=3.8.
- 2) conda activate pyoccenv.
- 3) conda install -c conda-forge pythonocc-core.
- 4) python -c "import OCC; print(OCC.VERSION)"
- 5) conda install -c conda-forge pyside2.
- 6) now the environment to be created for python occ.
- 7) run the below step conversion script on anaconda command prompt.



```
occ.py 2 x  ifc_to_step.py 4  DataExchange.py 9+
C:\Users\19174\AppData\Roaming\Python\Python311\site-packages\pythonocc-core-master
1  from OCC.Display.SimpleGui import init_display
2  from OCC.Extend.DataExchange import read_stl_file, write_step_file
3
4  shp = read_stl_file(r"C:\Users\19174\Documents\mine.stl")
5
6  # Write the file as STEP
7  write_step_file(shp, "mine.step")
8
```

```
Anaconda Prompt (Anaconda3) - conda install -c conda-forge pythonocc-core - conda install -c conda-forge pyside2
p/occ.py", line 7
    write_step_file(shp, "C:\Users\19174\Documents\mine.step")
    ^
SyntaxError: (unicode error) 'unicodeescape' codec can't decode bytes in position 2-3: truncated \UXXXXXX escape

(pyoccenv) C:\Users\19174> python C:\Users\19174\AppData\Roaming\Python\Python311\site-packages\pythonocc-core-master\py
thonocc-core-master\.github\occ.py

*****
*****      Statistics on Transfer (Write)      *****
*****
*****
*****      Transfer Mode = 0 I.E. As Is      *****
*****      Transferring Shape, ShapeType = 0      *****
** WorkSession : Sending all data
Step File Name : mine.step(195796 ents) Write Done
```

8) Now the .stl file converted to .step file