Steps for running "post107mb.f90"

Core files: (Required for ANY run)

1. Makefile – This runs the fortran code and also, executes the "a.out" file.
2. post107mb.f90 – This runs the postprocessing of the two flo.case1.##.dat (initial and final design case)
3. Result_Out.py – This runs the macro in ParaView

Input files: (Required for specific run)

1. flo.case1.##.dat – design iteration input data files
2. MBL1.CONN – connection file for each test case (used for extracting "-7")
3. output – output of the design iteration (used for extracting "RHO0, P0, U0, V0")

Procedure:

1. Copy Makefile and post107mb.f90 to the test directory.
   REMARK: Make sure the input files (referred in previous section) are all present
2. Run the following command: "make check"
3. Two files should be created in the current directory in the format of:
Wing_Analysis_1.##.dat
4. Open ParaView
5. In the Menu Bar, click Macro -> Add new macro -> select "Result_Out.py"
   REMARK: "Result_Out.py" can be located anywhere on your local machine
6. In the Menu Bar, click File -> Open -> select "Wing_Analysis_1.##.dat"
   REMARK: Import the two Wing_Analysis_1.##.dat files from test directory
7. In the Menu Bar, click Macro -> click Result_Out.py
8. In the first window that pops up, input number of cross sections desired
9. In the subsequent windows that pops up, input the % - span location
   REMARK: There should be as many subsequent popup windows as the inputted cross section number
10. Wait for Macro to run and obtain the desired Outputs.