

전산유체해석실습 과제

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과제1

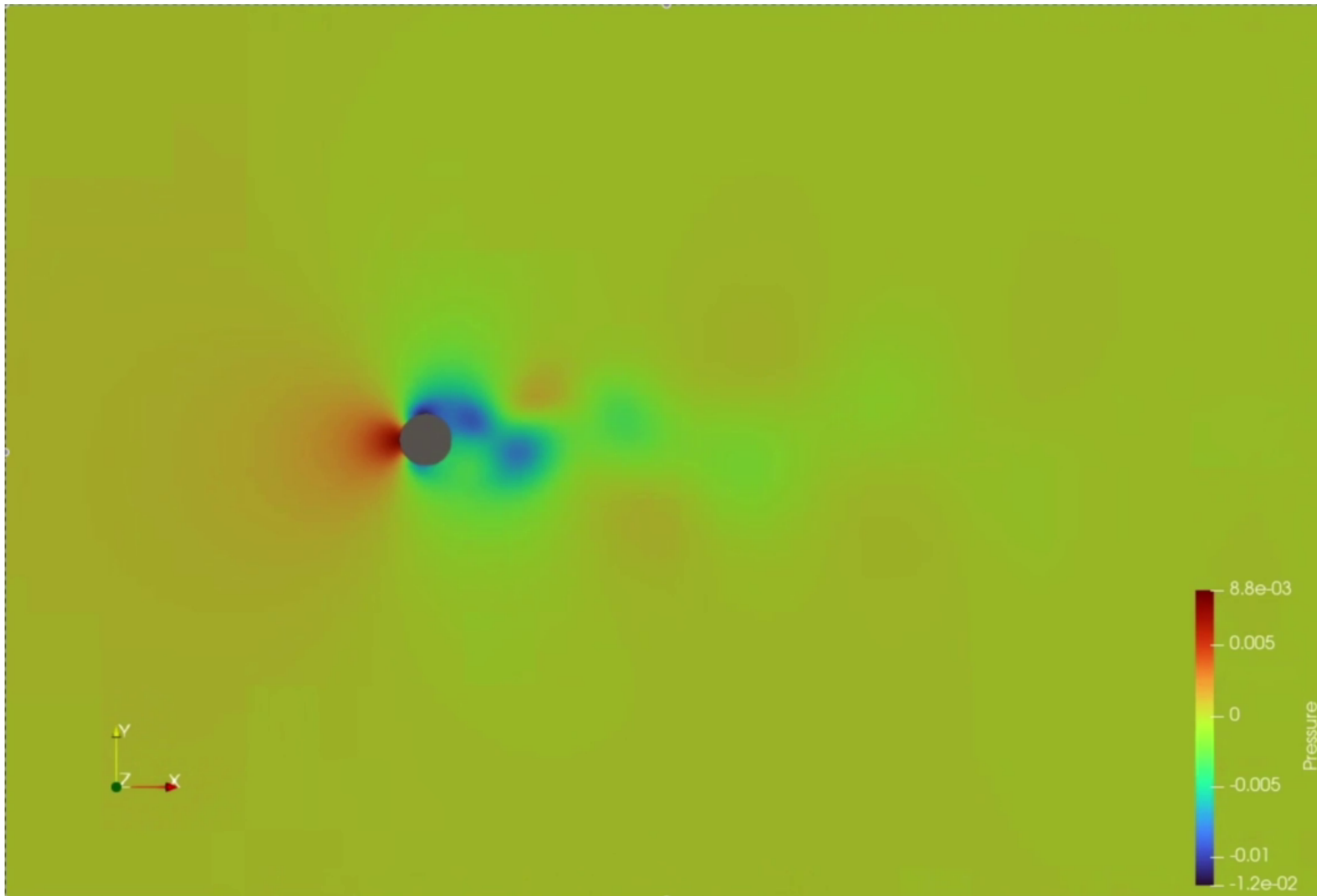
```
C:\Windows\System32\cmd.exe

2500| -7.023348| -6.907599| -7.151355| 0.344258| 1.798067|
2500| -7.865435| -7.901175| -7.279932| 0.352681| 1.798860|
2500| -8.151206| -8.451687| -7.596074| 0.358566| 1.799509|
2500| -8.481564| -8.886921| -7.905668| 0.362797| 1.800267|
2500| -8.794438| -9.311000| -8.157111| 0.365791| 1.800936|
2500| -9.042254| -9.632347| -8.385000| 0.367900| 1.801445|
2500| -9.264640| -9.880126| -8.588360| 0.369396| 1.801801|
2500| -9.464517| -10.063088| -8.764996| 0.370497| 1.802036|
2500| -9.639439| -10.202068| -8.913652| 0.371364| 1.802185|

----- Solver Exit -----
Maximum time reached (MAX_TIME = 25s).
-----
+-----+
| File Writing Summary | Filename |
+-----+
| SU2 binary restart  | restart_flow_02500.dat |
| Paraview             | flow_02500.vtu         |
+-----+

----- Finalizing Solver -----
Deleted CNumerics container.
Deleted CIntegration container.
Deleted CSolver container.
Deleted CIteration container.
Deleted CInterface container.
Deleted CGeometry container.
Deleted CFreeFormDefBox class.
Deleted CSurfaceMovement class.
Deleted CVolumetricMovement class.
```

과제1 paraview 영상



과제2

AOA의 값을 15로 변경

```
22  
23 % COMPRESSIBLE FREE-STREAM  
24 %  
25 MACH_NUMBER= 0.3  
26 AOA= 15  
27 FREESTREAM_TEMPERATURE= 293.0  
28 FREESTREAM_PRESSURE= 101325.0  
29 REYNOLDS_NUMBER= 1000.0  
30 REYNOLDS_LENGTH= 1.0  
31
```

PITCHING_AMPL,
PITCHING_OMEGA 설정 변경

```
55 GRID_MOVEMENT=RIGID_MOTION  
56 MOTION_ORIGIN=(0.25,0.0,0.0)  
57 PITCHING_AMPL=(0.0,0.0,6.0)  
58 PITCHING_OMEGA=(0.0,0.0,12.91675)  
59 % =====  
60 NUM_METHOD_GRAD= WEIGHTED_LEAST_SQUARES  
61 CONV_NUM_METHOD_FLOW= JST  
62 JST_SENSOR_COEFF= ( 0.5, 0.005 )  
63 CONV_NUM_METHOD_TURB= SCALAR_UPWIND  
64 MUSCL_TURB= NO  
65
```

과제2

변경한 설정으로 CMD를 돌려 결과값 구하기

```
C:\Windows\System32\cmd.exe

+-----+
|      425 |      0 | -5.244509 | 0.000000 | 0.257291 | 0.511167 | 1.0000e+00 | 1.0000e+00 |
|      425 |      8 | -8.605672 | -3.361163 | 0.277920 | 0.588898 | 1.0000e+00 | 1.0000e+00 |
+-----+

----- Solver Exit -----
Maximum time reached (MAX_TIME = 1s).

+-----+
|      File Writing Summary      |      Filename      |
+-----+
| SU2 binary restart              | restart_flow_00425.dat |
| Paraview                       | flow_00425.vtu        |
+-----+

----- Finalizing Solver -----
Deleted CNumerics container.
Deleted CIntegration container.
Deleted CSolver container.
Deleted CIteration container.
Deleted CInterface container.
Deleted CGeometry container.
Deleted CFreeFormDefBox class.
Deleted CSurfaceMovement class.
Deleted CVolumetricMovement class.
Deleted CConfig container.
Deleted nInst container.
Deleted COutput class.

----- Exit Success (SU2_CFD) -----
```

과제2 paraview 사진과 영상

