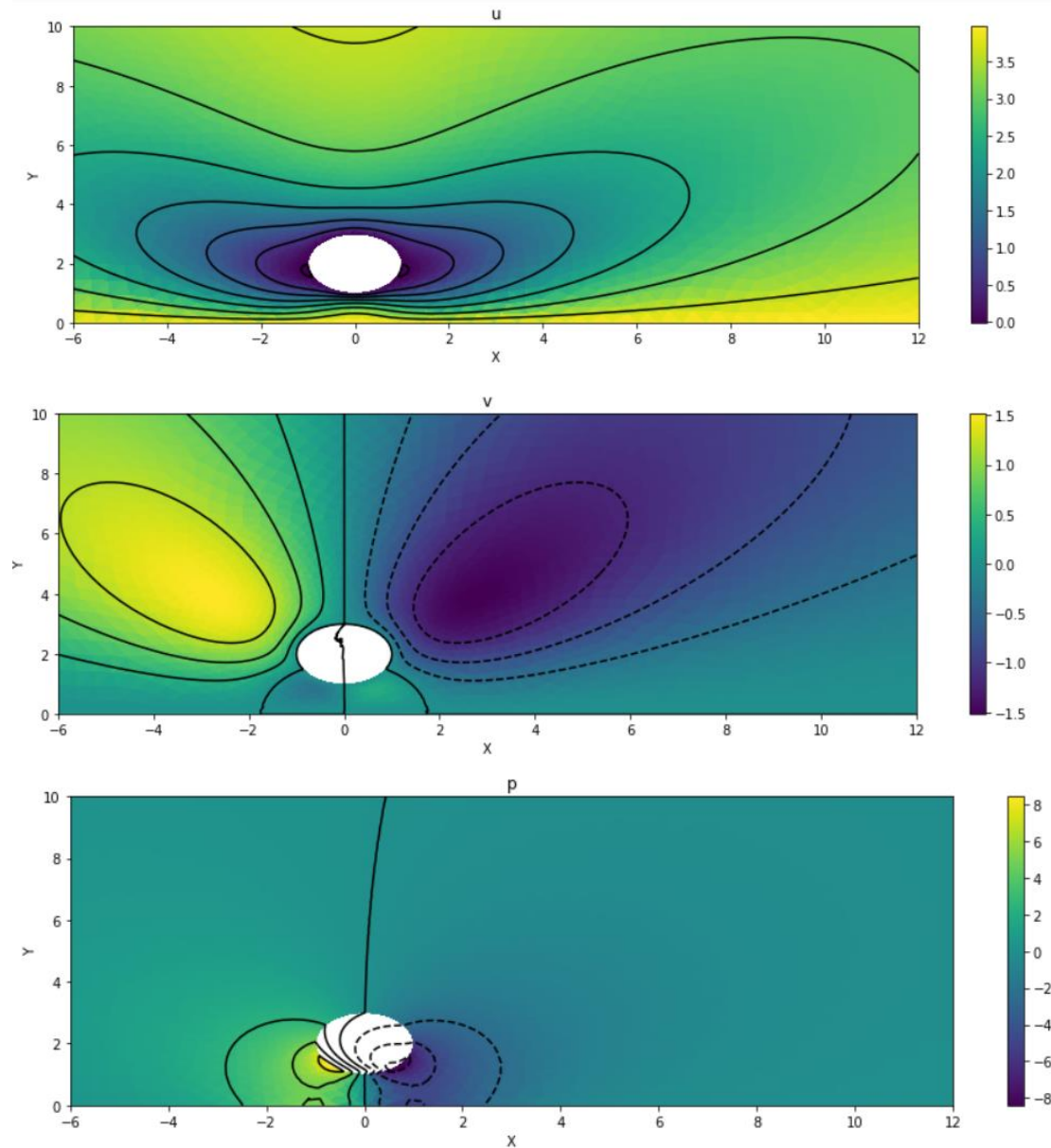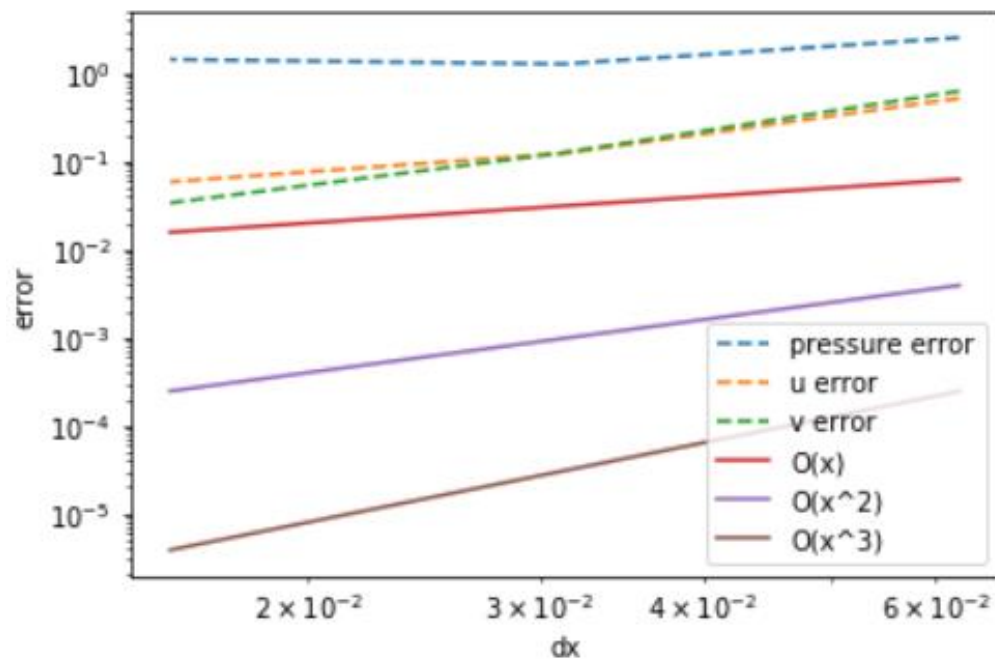# CS555 Project Report

Xiruo Li(xiruoli2)

Part 1

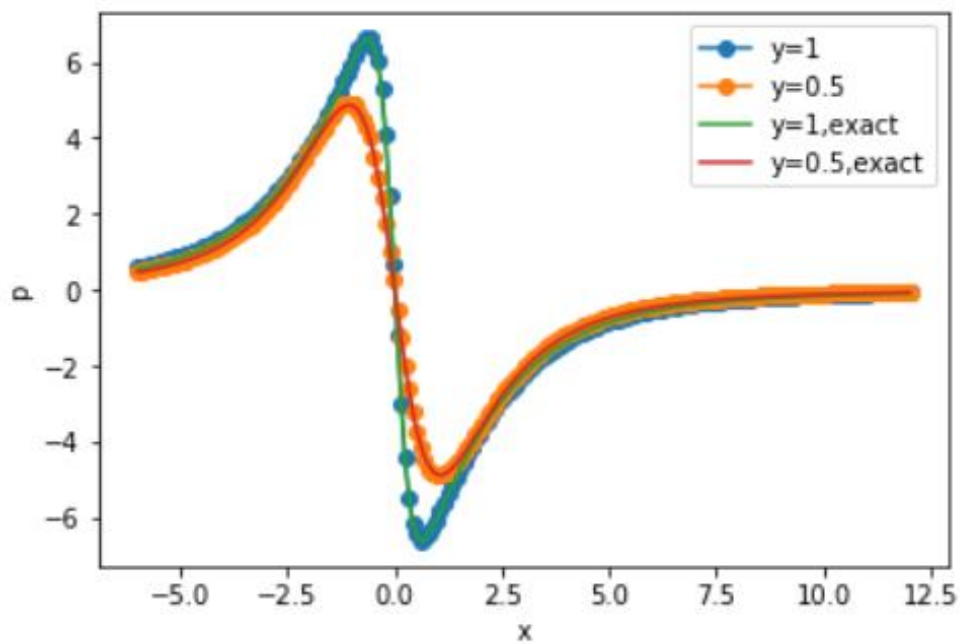(1) solution fields (u, v and p) for the most fined mesh.

(2)L2 norm of errors

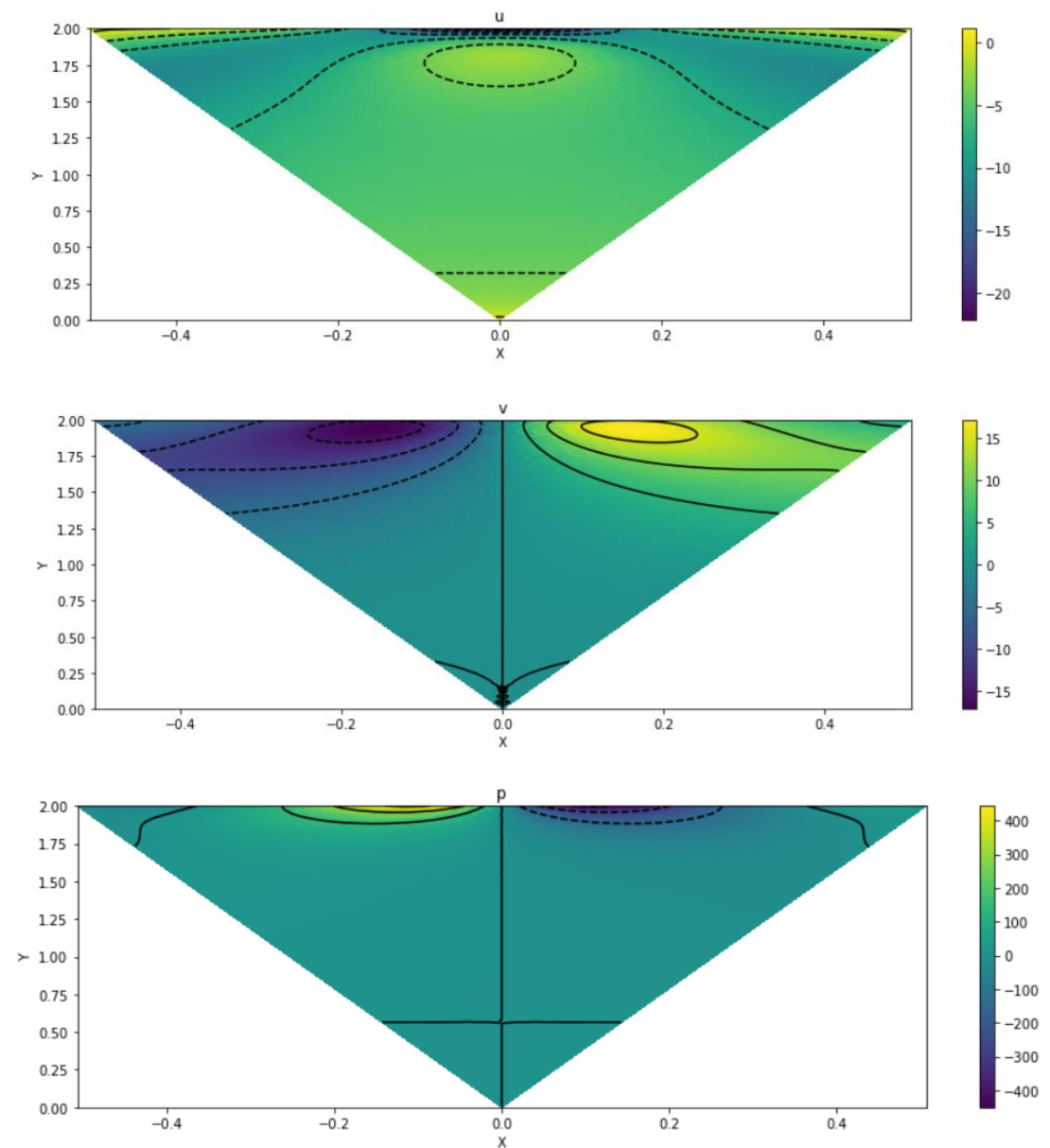The norm of u v error is 2nd order convergence rate.

The norm of p error is 1st order convergence rate.

(3) pressure on two cross sections, x=[-6,12],y=0.5 and x=[-6,12],y=1.

Part 2(c)

(1) solution fields (u, v and p) for the most fined mesh.

(2) pressure table

```
wedge      left       right
wdg1 -67.99287768  67.99764429
wdg2 -57.08526459  57.10239
wdg3 -51.76269626  51.76321534
The pressure decrease when mesh is refined
```