

## Scientific Coding Skills

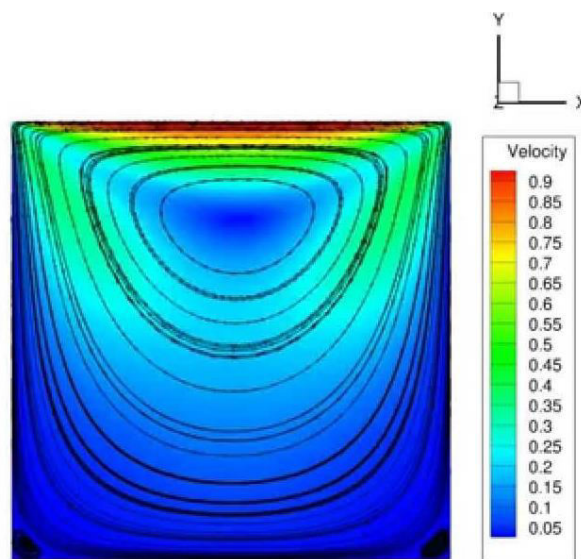
This assignment is to show scientific coding skills. You are given a coding of Lid Driven Cavity; you need to modify the boundary conditions to convert it into channel flow.

The code file is attached. The instructions are to modify the code to switch from the lid driven cavity problem to the channel flow problem.

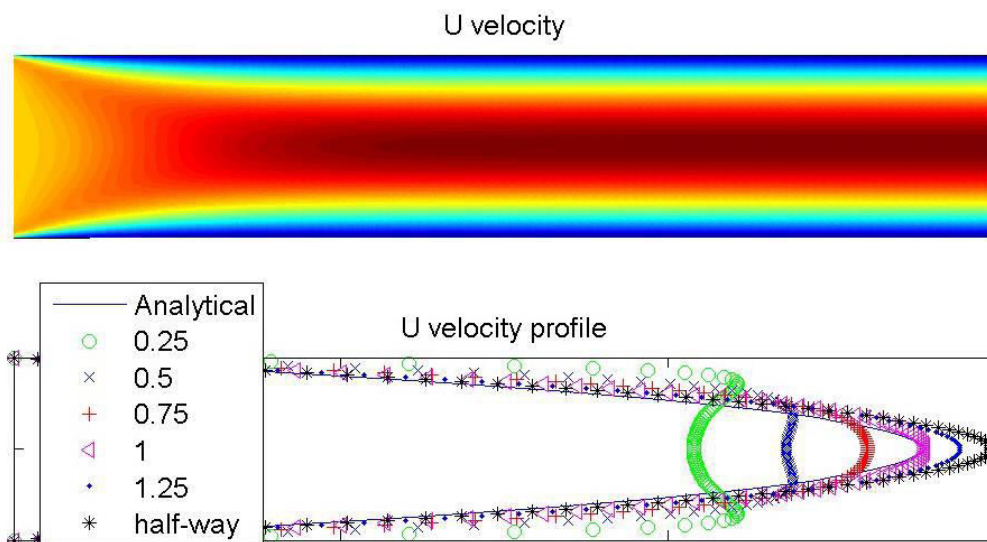
Tasks for the project:

1. You can modify the coding if required along with boundary conditions
2. You can rewrite it and show how lid driven cavity is modified to channel flow

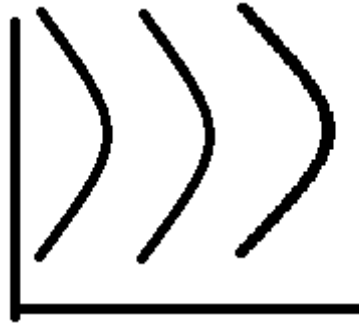
Initially its like this the u velocity profile:



End result you should get a u velocity profile roughly like this.



For example like this profile



Your aim is to achieve this type of profile.