



Assignments and laboratory tasks

- Simulate a laminar pipe flow with 2 mm pipe inner diameter and 6 mm length.
- Create a 2D axisymmetric model of the flow using uniform 1/15 mm cell size. Use uniform 1 m/s inlet velocity and study entrance length effect. Develop an OpenFOAM utility to create "parabolic" inlet velocity profile. Re-run simulation with parabolic inlet velocity profile. Determine how the entrance length changes.
- For bonus points:
 - Keep track of file changes with git.
 - Debug the "parabolic" utility using GDB.