ACFD 2020 HW1 Reference solution
Task 1
contour-4
Velocity Magnitude
0.0678
0.0610
0.0542
0.0475
0.0407
0.0339
0.0271
0.0203
0.0136
$=0.0068$
0.0000

Contour of velocity magnitude


Contour of temperature

## Task 2




Task 3
For half-pipe geometry, the values of H (in Watts) are:
Big inlet: 49113
Small inlet: 64449
Outlet: 113568
(Double those values for full-pipe geometry.) The sum of the H's of the two inlets approximately balances that of the outlet.

Task 4

Velocity Magnitude


Contour of velocity magnitude


Contour of temperature

