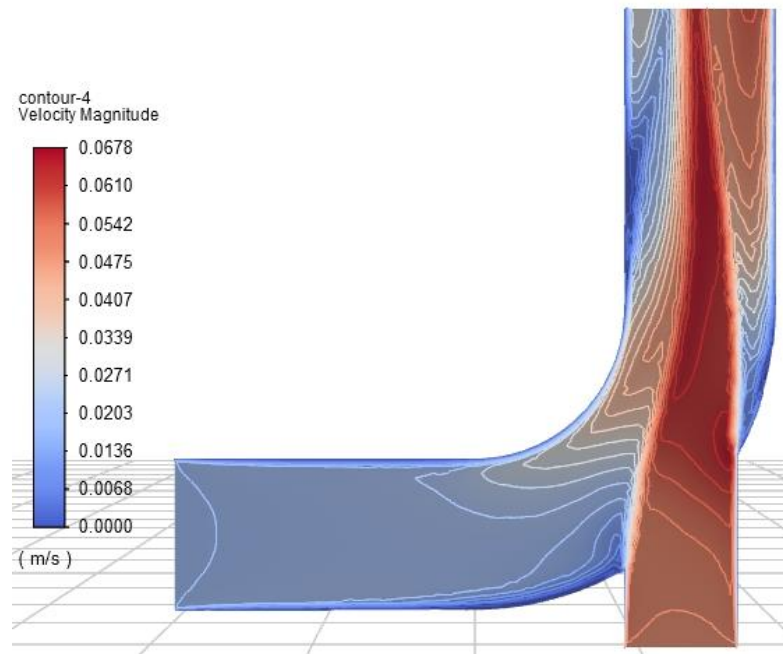
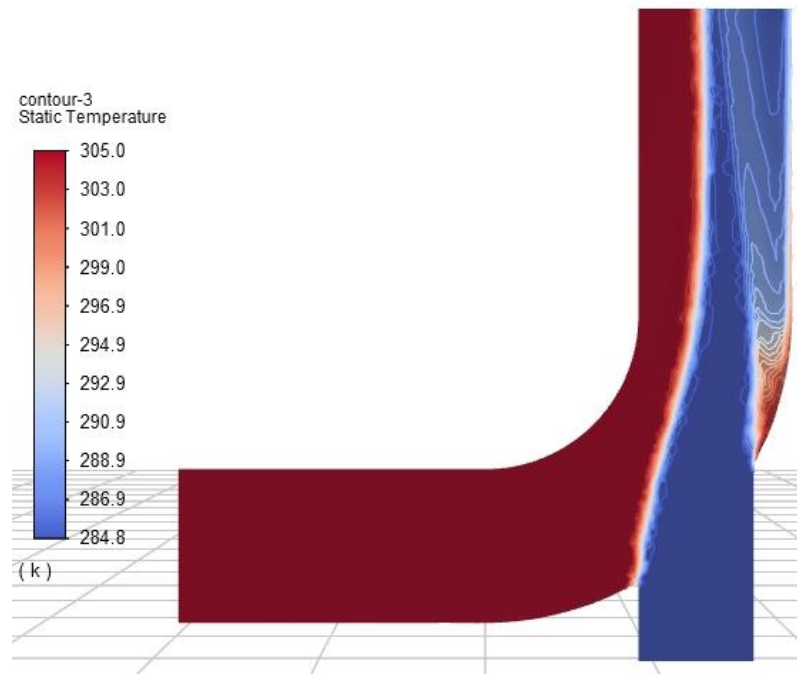


# ACFD 2020 HW1 Reference solution

## Task 1

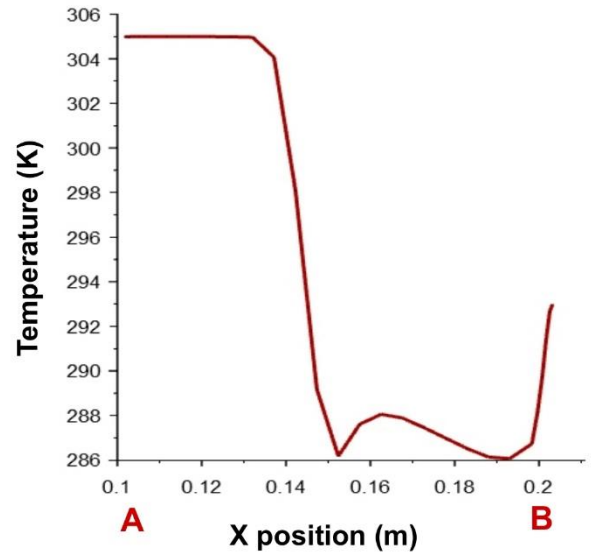
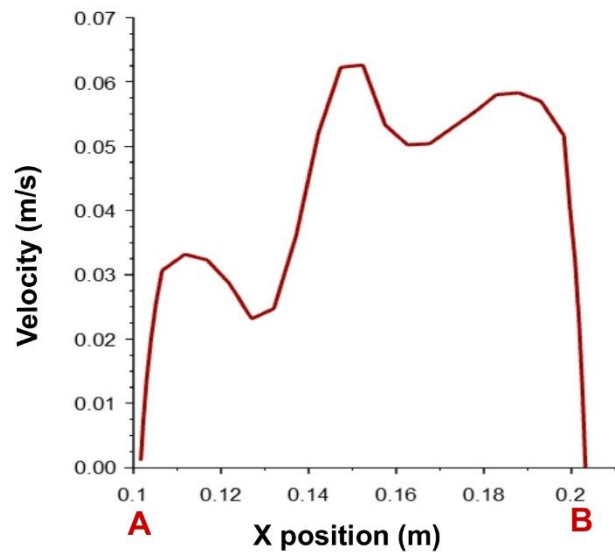


Contour of velocity magnitude



Contour of temperature

## Task 2



## Task 3

For half-pipe geometry, the values of H (in Watts) are:

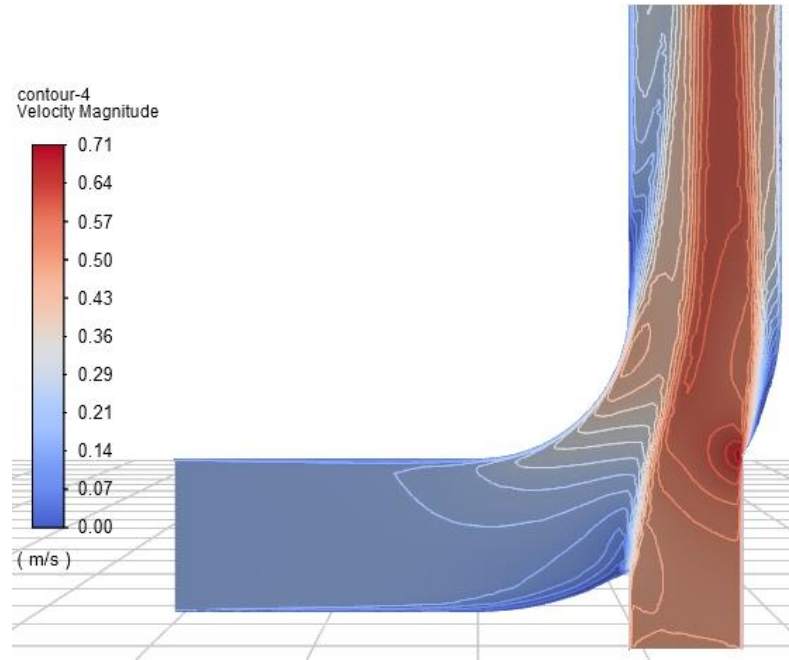
Big inlet: **49113**

Small inlet: **64449**

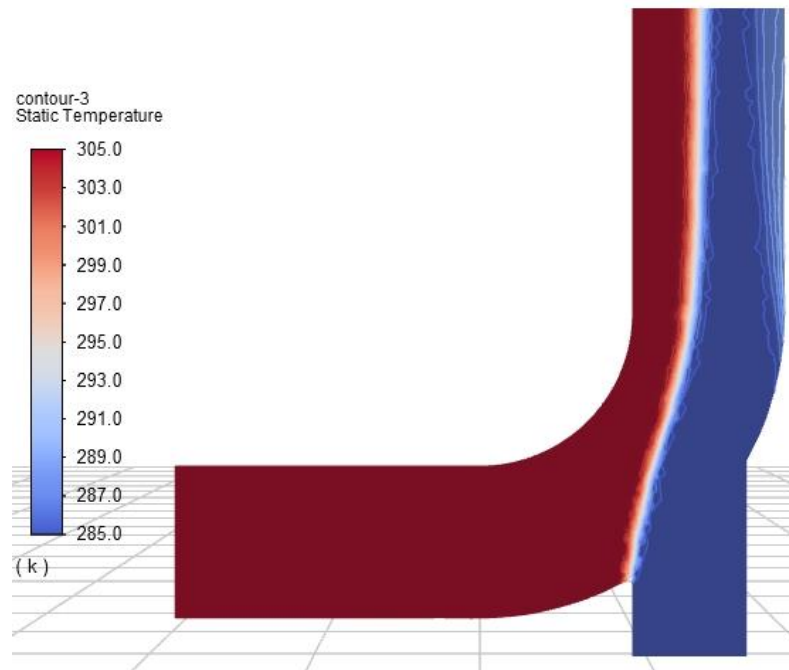
Outlet: **113568**

(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



Contour of velocity magnitude



Contour of temperature