

**ME-543**  
**Computational Fluid Dynamics**

**Assignment-3**

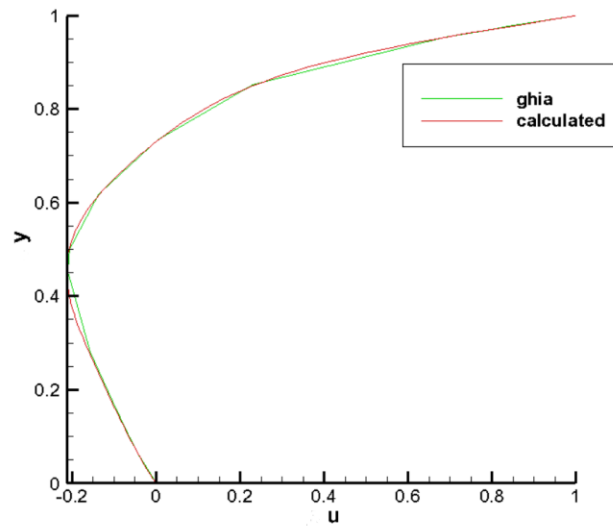
**STREAM FUNCTION DISTRIBUTION USING  
C PROGRAMMING AND TECPLOT**

**BILOW KUMAR**

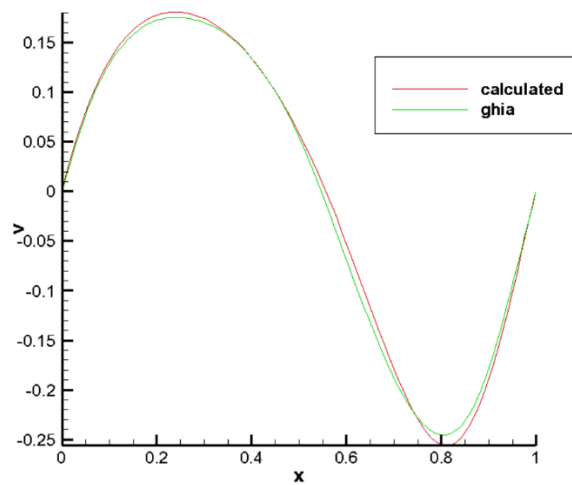
**RollNo:224103331**

Reynold's Number=100

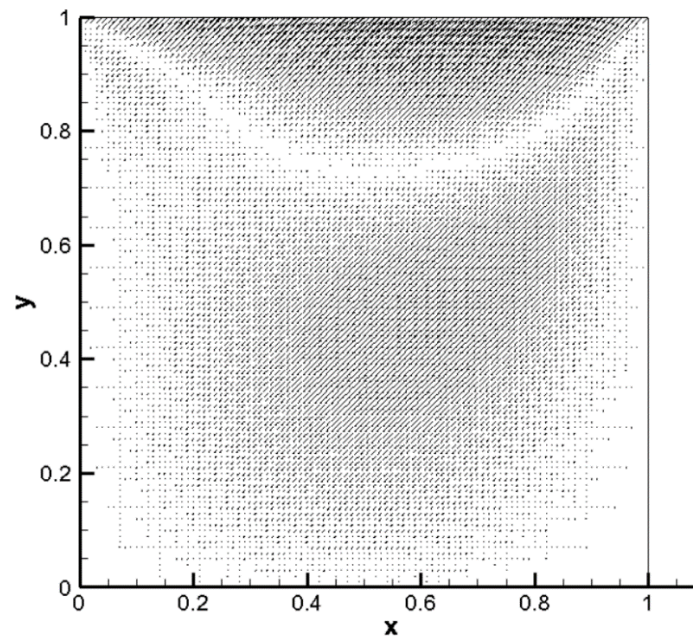
1. Centre Line horizontal velocity( $u_{\text{centerline}}$ ):



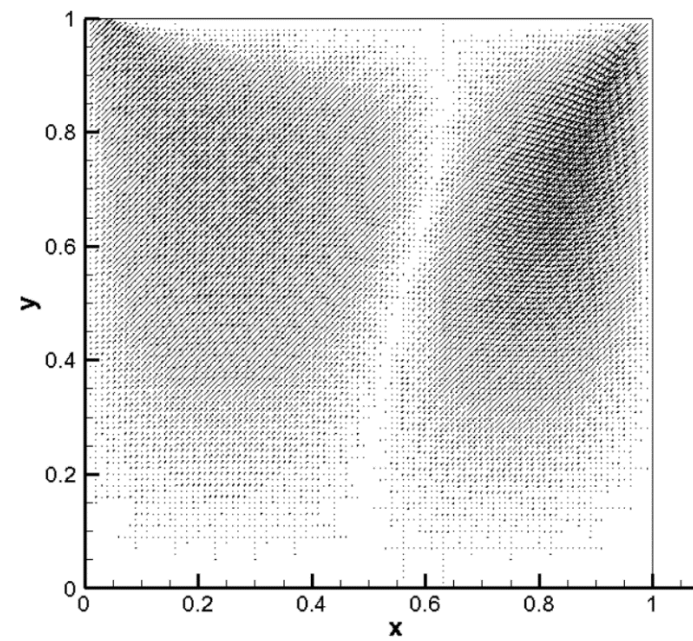
2. Centre Line vertical velocity( $v_{\text{centerline}}$ ):



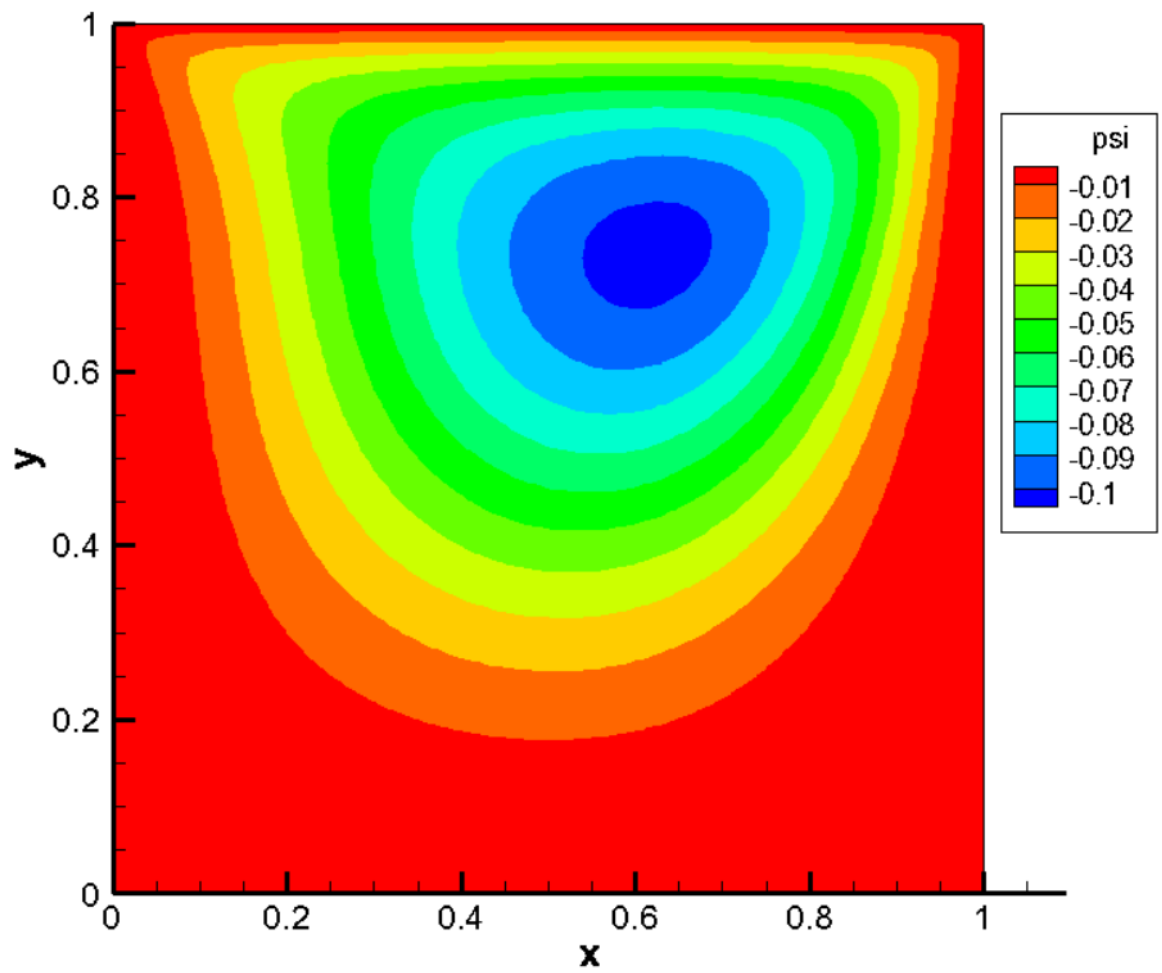
3.  $u\_vector$  plot:



4.  $v\_vector$  plot:

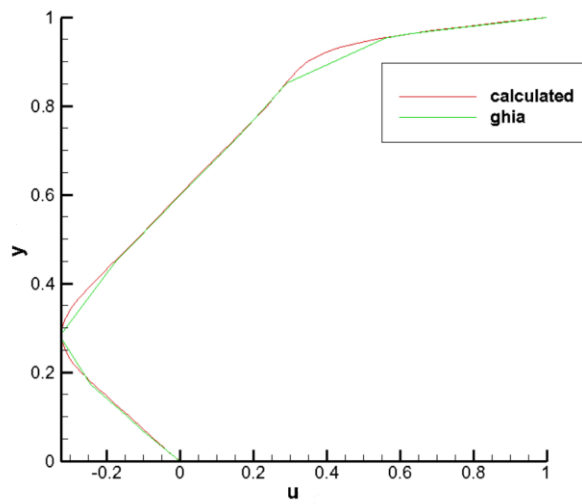


5. Streamline Plot:

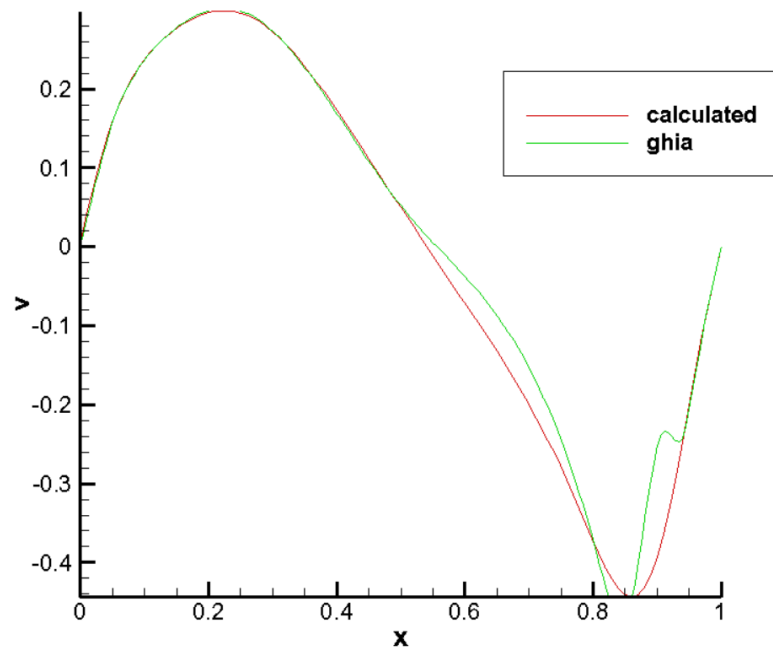


Reynold's Number =400

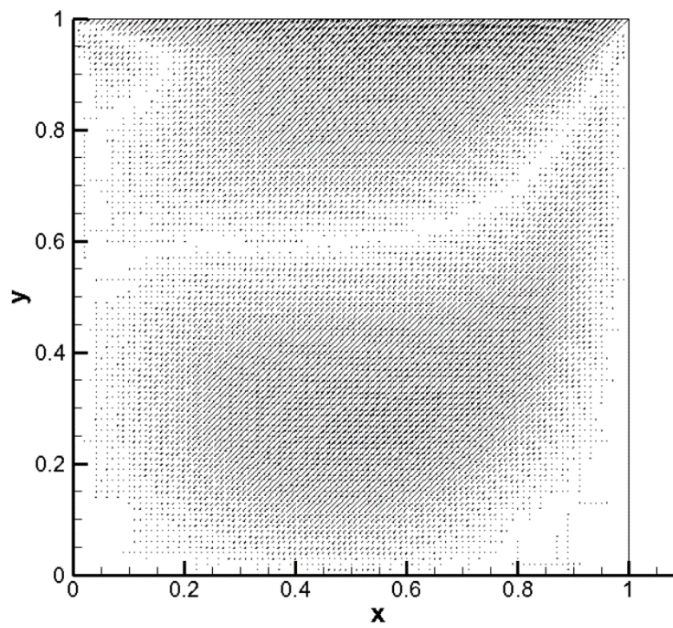
1. Centre Line horizontal velocity( $u_{\text{centerline}}$ ):



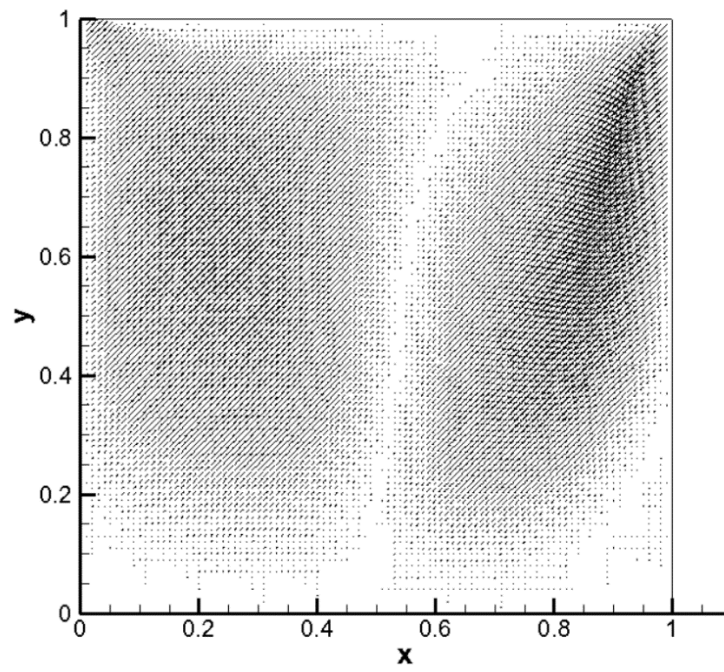
## 2. Centre Line vertical velocity( $v$ ):



## 3. $u$ \_vector plot:



4.  $\mathbf{v}_{\text{vector}}$  plot:



### 5. Streamline Plot:

