



# **BURSA TECHNICAL UNIVERSITY**

Department of Mechanical Engineering  
Computational Fluid Dynamics  
(MECHT0505)

## **Report of Assignment 1**

### **A Lid-Driven Cavity Flow at $Re=100$ Using Open Source Software**

**By**

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# 1 Introduction

Briefly introduce the problem of lid-driven cavity flow and mention the objective of analyzing it at  $Re=100$  to observe two small vortices around the bottom corners.

# 2 Methodology

Describe the computational approach used to solve the problem, including mesh generation and boundary conditions.



Figure 2: Velocity contours at  $Re = 100$

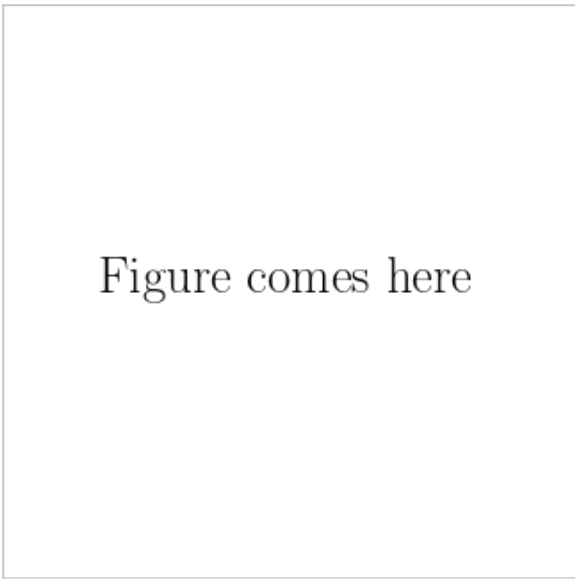


Figure 1: Computational mesh for the cavity problem



Figure 3: Pressure contours at  $Re = 100$

Summarize the findings, emphasizing the observation of two small vortices around the bottom corners at  $Re=100$ .

Discuss the simulation parameters, including the Reynolds number adjustment to  $Re=100$ .

# 3 Results

Present and discuss the results.

## 4 Contribution

Detail the contributions of each group member.

<b>Team member</b>	<b>Contribution</b>
Name Surname	Worked on mesh generation.
Name Surname	Conducted simulations.
Name Surname	Analyzed results.

Table 1: Contributions of group members