National Textile University

Department of Computer Science

Name

Gulam Rasool

Reg No:

23-NTU-CS-FL-1159

Semester:

5th

Lab:

06

Submitted to:

Sir Nasir Mehmood

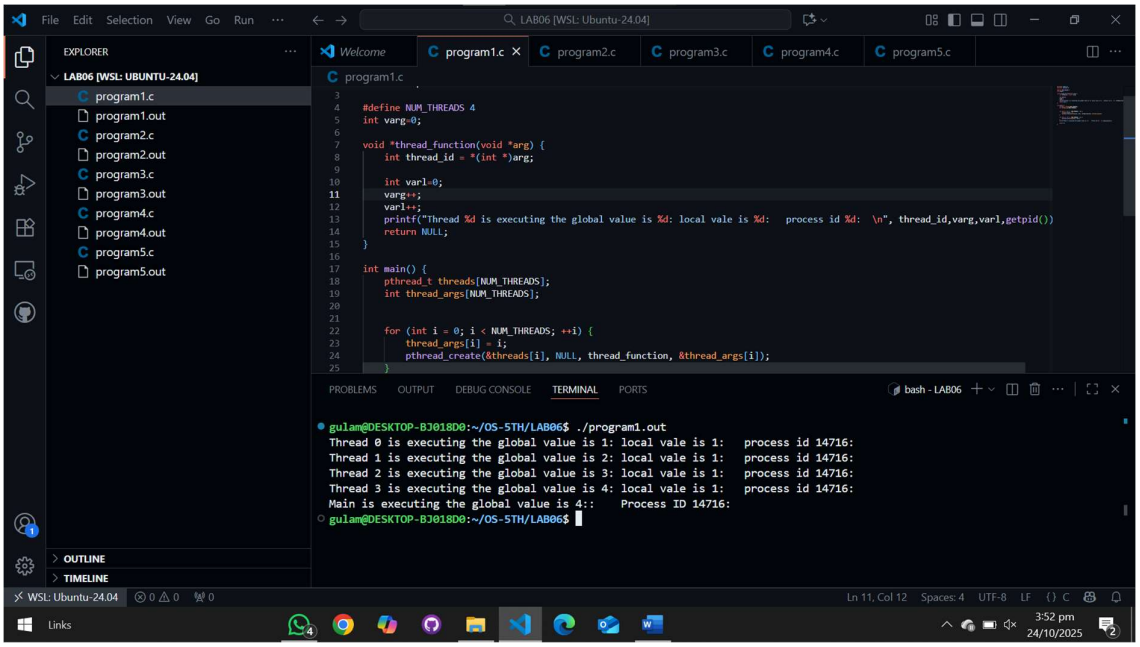
LAB-06

In this LAB we discuss some programs about synchronous using Peterson and Mutex Algorithm

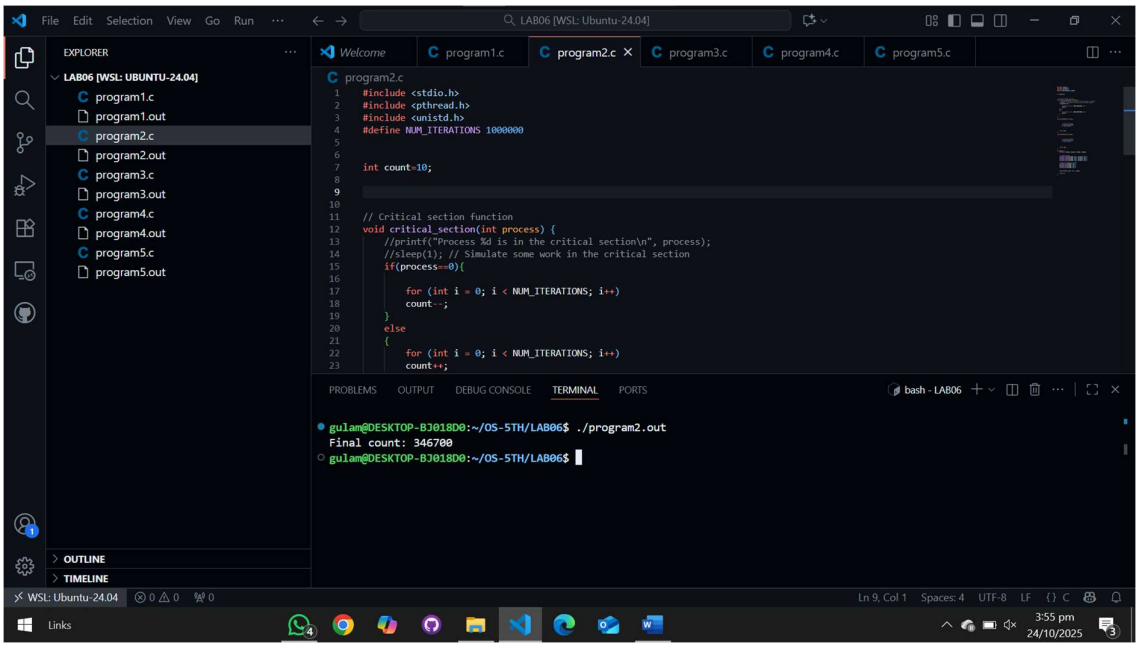
PeterSon Algorithm	Mutex Algorithm

• In this we use **While Loop** for the iteration and check the Synchronization.
• In this we write all code by **hand**
• The steps include
  ○ Flag [2]
  ○ Turn
  ○ While loop
	• In this we use a built-In Function **Pthread_mutex_t** object
	• In this all computation will be by the Built-in Function
	• The function we use are
	  ○ Pthread_mutex_t
	  ○ Pthread_mutex_init
	  ○ Pthread_mutex_destroy

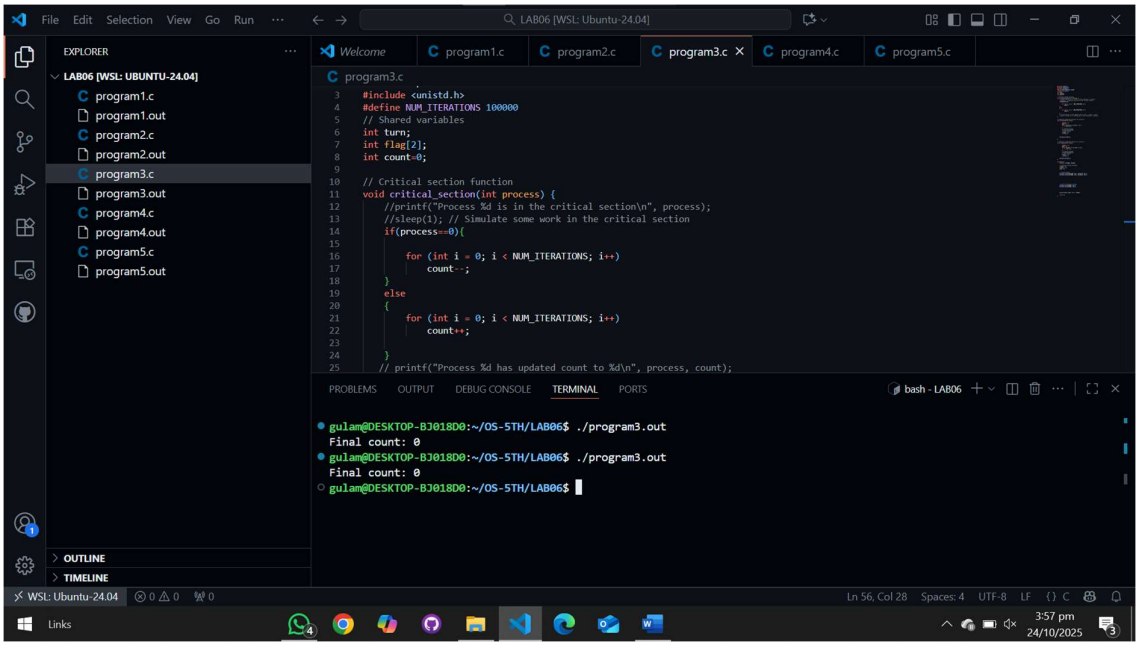
Program1-Multi-Threading



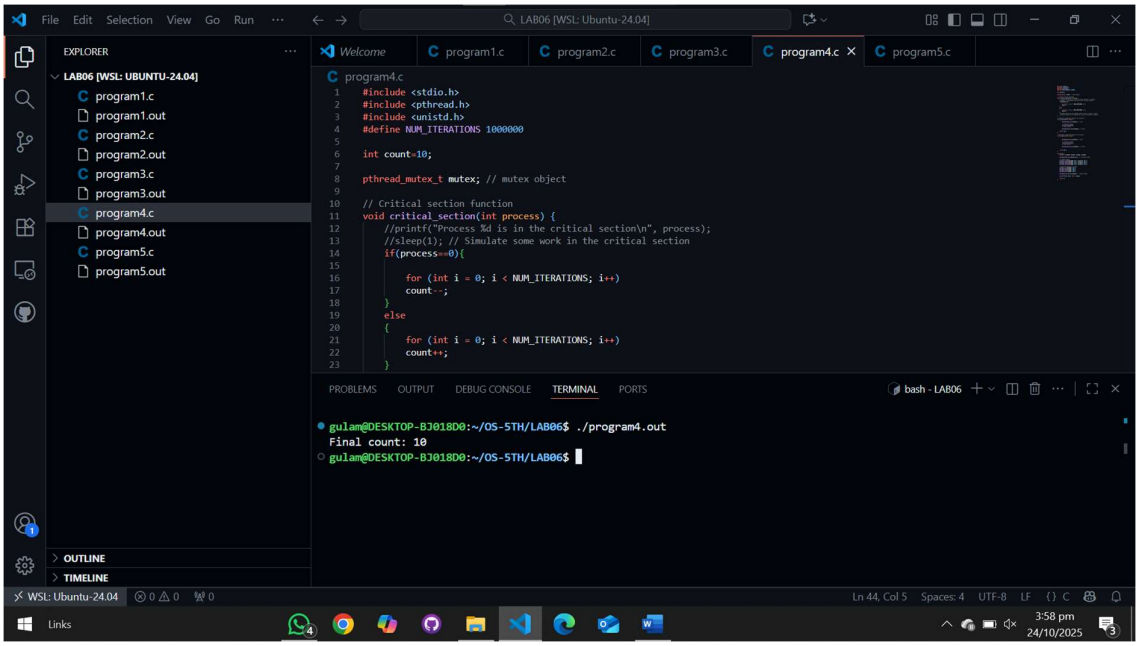
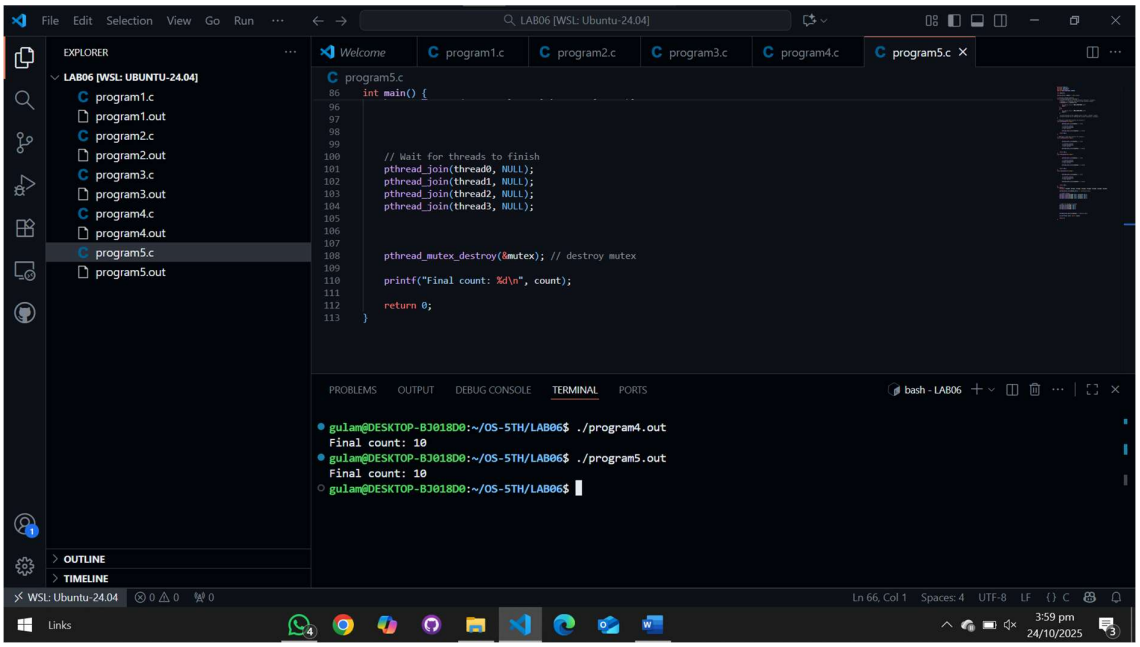
Program2 – Multi_Processing without synchronization



Program3- Multi_Processing with PeterSon Algorithm



Program 4 – Multiprocessing with Mutex



Program 5 – Multiprocessing (4 process) with mutex