***Activity 1:***

**Individual and Collaborative Learning**

Learning Linux was a tedious task as I was used to Windows for a long time. Switching to Linux was smooth as the resource and faculty engagement helped for this transition.

Key Learnings:

1. How to use command line for all the majority of the tasks.
2. Usage of shell and commands for faster computation of the programs.
3. GNU tools for compilation and execution of the C/C++ programs.
4. Understanding how the Linux OS works and its components like kernel to get in depth knowledge of the same.
5. Process and Threading concepts to understand about how a program works in multiple process and its advantages.
6. IPC techniques for the communication between any two processes running in parallel.

Challenges and Overcoming of it:

1. Faced challenges of how to use the Linux command inside a C program as it was crucial for the assignments and Overcame it using the peer help (execl command usage).
2. Usage for Pthread in any program and understood by resources online. Details on Pthread.
3. Understanding of message queues. Got clarified from a peer.

Good Learning Resources:

1.Playlist for Process and Pipes: Process and Pipes.

2.Overall Understanding of Linux

Observations and Learnings from Peer Reviews:

1.Usage of static libraries was learnt from my peer reviews execution of code.

2.Effectively using make file.