

Experiment No: 01

Experiment Name:

- (i) Create processes using **fork()** system call program.
- (ii) Replace processes using **exec()** system call program.

Linux Command:

- (iii) How do you create a new directory in Linux using the **mkdir** command in Linux?
- (iv) How do you navigate to the parent directory using the **cd** command in Linux?
- (v) How do you change the permissions of a file or directory using the **chmod** command in Linux?
- (vi) How do you display the contents of a file using the **cat** command in Linux?
- (vii) How do you copy a file from one location to another using the **cp** command in Linux?

Experiment No: 02

Experiment Name:

- (i) Write a C program to simulate producer-consumer problem using Semaphores.

Linux Command:

- (ii) How do you create a zip archive in Linux?
- (iii) How do you extract a zip archive in Linux?
- (iv) How do you compress a zip archive in Linux?
- (v) How do you display the network interfaces in Linux?
- (vi) How do you configure a network interface in Linux?

Experiment No: 03

Experiment Name:

- (i) Simulate the following CPU scheduling algorithms -- **FCFS**

Linux Command:

- (ii) How do you display the system information in Linux?
- (iii) How do you update the system packages in Linux?
- (iv) How do you install a new package in Linux?
- (v) How do you remove a package in Linux?
- (vi) How do you display the system log messages in Linux?

Experiment No: 04

Experiment Name:

- (i) Simulate the following CPU scheduling algorithms -- **Shortest Job First**

Linux Command:

- (ii) How do you view the routing table in Linux?
- (iii) How do you add a route to the routing table in Linux?
- (iv) How do you delete a route from the routing table in Linux?
- (v) How do you ping a remote host in Linux?
- (vi) How do you display the DNS configuration in Linux?

Experiment No: 05

Experiment Name:

- (i) Simulate the following CPU scheduling algorithms -- **Priority Scheduling**

Linux Command:

- (i) How do you display the manual page for a command in Linux?
- (ii) How do you change the network configuration in Linux?
- (iii) How do you display the list of installed packages in Linux?
- (iv) How do you install a package in Linux?

Experiment No: 06

Experiment Name:

- (i) Write a C program to simulate the concept of - **Producer & Consumer Problem**

Linux Command:

- (ii) How do you add a route to the routing table in Linux?
- (iii) How do you delete a route from the routing table in Linux?
- (iv) How do you ping a remote host in Linux?
- (v) How do you display the DNS configuration in Linux?
- (vi) How do you edit the DNS configuration in Linux?

EXPERIMENT No: 07

Experiment Name:

(i) Write a C program to simulate the concept of -- **Multilevel Queue Scheduling**

Linux Command:

- (i) How do you create a new user in Linux?
- (ii) How do you delete a user in Linux?
- (iii) How do you change the password of a user in Linux?
- (iv) How do you add a user to a group in Linux?
- (v) How do you remove a user from a group in Linux?

EXPERIMENT No: 08

Experiment Name:

(i) Write a C program to simulate the concept of **Readers-Writers Problem**

Linux Command:

- (i) How do you edit the DNS configuration in Linux?
- (ii) How do you display the system information in Linux?
- (iii) How do you shut-down the system in Linux?
- (iv) How do you restart the system in Linux?
- (v) How do you display the current network configuration in Linux?

EXPERIMENT No: 09

Experiment Name:

(i) Write a C program to simulate the concept of **Dining-philosophers problem.**

Linux Command:

- (ii) How do you extract a tar archive in Linux?
- (iii) How do you compress a tar archive in Linux?
- (iv) How do you give read, write, and execute permissions to a file or directory in Linux?
- (v) How do you remove read, write, and execute permissions from a file or directory in Linux?
- (vi) How do you delete a file using the rm command in Linux?