

Mr. Maulik D Trivedi | A.Y.: 2022-23 | Sem./Year: 4 | Subject: 2101CS403 - Operating System | Slot Type: Lab | Division: CSE-4A

No.	Course Content	Planning Title	Planning Description
1	Introduction	Unix/Linux Introduction and Command	Development of Unix/Linux, Role & Function of Kernel, System Calls, Elementary Linux command & Shell Programming, Explain the following Unix Commands: cd, ls, man, echo, cal, date, clear, cat
2	Introduction	Shell Scripts (Using if statement)	Write a Shell Script: 1. Which works like a calculator and performs below operations Addition, Subtract, Division and Multiplication? 2. To find a greater number out of 2 numbers.
3	Introduction	UNIX/Linux Commands	Explain the following Unix Commands: who, whoami, uname, passwd, mkdir, rmdir, cp, mv, rm, cut, paste, more
4	Introduction	Shell Scripts (Using if...else and nested if statement)	Write a Shell Script: 1. To check given number is ODD or EVEN. 2. To find the largest among the 3 given numbers.
5	Introduction	UNIX/Linux Commands	Explain the following Unix Commands: cmp, comm, diff, chmod, chown, chgrp, file, finger, sleep, kill, ps, wc
6	Introduction	Shell Scripts (Using if...else and if-else-if ladder)	Write a Shell Script: 1. To check given year is Leap year or not. 2. Write a shell script to generate mark sheet of a student. Take 3 subjects, calculate and display total marks, percentage and Class obtained by the student.
7	Introduction	UNIX/Linux Commands	Explain the following Unix Commands: ln, nl, head, tail, sort, find, uniq, tr, history, pipe, write, wall
8	Introduction	Shell Scripts (Using while loop)	Write a Shell Script: 1. To print 1 to 'n' numbers. 2. To find Sum & Average of 'n' numbers. 3. To display the multiplication table of the given number.

9	Introduction	Shell Scripts (Using while loop)	Write a Shell Script: 1. To find factorial of given number n. 2. To check whether a given number is palindrome or not.
10	Introduction	Shell Scripts (Using while loop)	Write a Shell Script: 1. To find the value of one number raised to the power of another. 2. To check whether a given number is prime or not. 3. Which will accept a number n and display first n prime numbers as output?
11	Introduction	Shell Scripts (Using for loop)	Write a Shell Script: 1. To print the pyramid structure for the given number. 2. To check whether the given string is palindrome or not.
12	Introduction	Shell Scripts (Using while loop and cal command)	Write a Shell Script: 1. To find first n Fibonacci numbers like: 0 1, 1, 2, 3, 5, 13, ... 2. To scan the name of the command and execute it. 3. To display current month calendar.
13	Introduction	Shell Scripts (Using while loop, date and tty command)	Write a Shell Script: 1. Which will print the following menu and execute the given task? a. Display calendar of current month b. Display today's date and time c. Display usernames that are currently logged in the system d. Display your name at given x, y
14	Introduction	Shell Scripts (Using array, ls and date command)	Write a Shell Script: 1. To read n numbers as command arguments and sort them in descending order. 2. To display all executable files, directories and zero sized files from current directory. 3. To display the date, time and a welcome message (like Good M
15	Introduction	Shell Scripts (Using date, passwd and who command)	Write a Shell Script: 1. To validate the entered date. (E.g. Date format is: dd-mm-yyyy). 2. Which checks whether a given user is valid or not. 3. That finds total no. of users and finds out how many of them are currently logged in. 4. Write an awk program