Assignment List

Sl. No.	Topic of Assignment	СО	PO and PSO mapping
1.	Understand the function of some Unix commands for general-purpose utilities of the	MCA 392.1	PO ₁ , PO ₂ , PO ₃ , PO ₄
	system. And also common file handling Commands.		PSO ₁ , PSO ₂
2.	Understand different modes of Vi editor. And also the concept of shell script and how	MCA 392.2	PO ₁ , PO ₂ , PO ₃ , PO ₄
	it works.		PSO ₁ , PSO ₂
3.	The marks obtained by a student in 5 different subjects are input through the keyboard.	MCA 392.3	PO ₁ , PO ₂ , PO ₃ , PO ₄
	The student gets a division as per the following rules: Percentage above or equal to 60 First division		PSO ₁ , PSO ₂
	Percentage between 50 and 59Second division Percentage between 40 and 49Third division		
	Percentage less than 40 Fail		
	Write a shell script to calculate the division obtained by the student.		
4.	Write a shell script to print the following-	MCA 392.3	PO ₁ , PO ₂ , PO ₃ , PO ₄
	1		PSO ₁ , PSO ₂
	2 2		
	3 3 3		



	4 4 4 5 5 5 5		
5.	Write a shell script to print all prime numbers between 1 to 100.	MCA 392.3	PO ₁ , PO ₂ , PO ₃ , PO ₄ PSO ₁ , PSO ₂
6.	Write a shell script to find factorial value of any number passed as an argument	MCA 392.3	PO ₁ , PO ₂ , PO ₃ , PO ₄ PSO ₁ , PSO ₂
7.	Write a shell program / script to accept command line arguments. If the number of argument supplied is one, display "one", if it is two, display "two" and if it is three supplied, report it as "Error".	MCA 392.3	PO ₁ , PO ₂ , PO ₃ , PO ₄ PSO ₁ , PSO ₂
8.	Write a shell program / Script to append a line of text to a given text file. The text line will be provided as command line arguments	MCA 392.3	PO ₁ , PO ₂ , PO ₃ , PO ₄ PSO ₁ , PSO ₂
9.	Write a shell program / Script to modify cal command, so that following can be executed in command line: \$\text{scal 9} \text{#display the calender of september, current year} \$\text{scal sep} \text{#display the calender of september, current year} \$\text{scal sep 2002} \text{#display the calender of september, 2002}	MCA 392.3	PO ₁ , PO ₂ , PO ₃ , PO ₄ PSO ₁ , PSO ₂

	\$cal #display the calender of current year pagewise \$cal 9 2001 #display the calender of september,2001		
10.	Write a shell script, which will take a string as input and display in the following format. e.g.: Enter a string: UNIX Output U U N U N U N I U N I X	MCA 392.3	PO ₁ , PO ₂ , PO ₃ , PO ₄ PSO ₁ , PSO ₂
11.	Two numbers are entered through the keyboard as command line arguments. Write a shell program / script to find the value of one number raised to the power of another.	MCA 392.3	PO ₁ , PO ₂ , PO ₃ , PO ₄ , PO ₅ PSO ₁ , PSO ₂
12.	Write a shell script that deletes all the lines that contains the word "virus".	MCA 392.3	PO ₁ , PO ₂ , PO ₃ , PO ₄ , PO ₅ PSO ₁ , PSO ₂

13.	Write a shell script to check if a given string is palindrome or not.	MCA 392.3	PO ₁ , PO ₂ , PO ₃ , PO ₄
			PSO ₁ , PSO ₂
14.	Write a shell program / Script to check whether two files are same or not. If they are	MCA 392.3	PO ₁ , PO ₂ , PO ₃ , PO ₄ , PO ₅
	same, the second file will be deleted. File names are given as input.		PSO ₁ , PSO ₂
15.	Write a shell program to count the number of occurrences of a word from a file. Also	MCA 392.4	PO ₁ , PO ₂ , PO ₃ , PO ₄ , PO ₅
	display the line numbers where it occurs.		PSO ₁ , PSO ₂
16.	Write a shell program / Script so that it will periodically count the number of user	MCA 392.4	PO ₁ , PO ₂ , PO ₃ , PO ₄ , PO ₅
	logged in .It will send a message if some new user logged in or some logged out. Give the period as command line argument.		PSO ₁ , PSO ₂
	the period as command the argument.		
17.	Write a shell program / Script which will give a message "Good morning", "Good	MCA 392.4	PO ₁ , PO ₂ , PO ₃ , PO ₄ , PO ₅
	afternoon","Good evening" depending of its time of execution.		PSO ₁ , PSO ₂
18.	Write a shell program / Script to check whether a given user name is valid or not	MCA 392.4	PO ₁ , PO ₂ , PO ₃ , PO ₄ , PO ₅
			PSO ₁ , PSO ₂
19.	Write a shell program which will take login name and display the time period the	MCA 392.4	PO ₁ , PO ₂ , PO ₃ , PO ₄ , PO ₅
	particular user logged in.		PSO ₁ , PSO ₂
20.	Write a shell program using array to sort the numbers entered using any sorting	MCA 392.4	PO ₁ , PO ₂ , PO ₃ , PO ₄ , PO ₅
	algorithm.		PSO ₁ , PSO ₂

21.	Suppose in a file, employee details are given which contains EmpId, Name,	MCA 392.5	PO ₁ , PO ₂ , PO ₃ , PO ₄
	Designation, Basic Salary, DA and HRA. Here DA is 50% of the Basic salary, HRA is		
	20% of the Basic salary. The Gross salary is the sum of the Basic salary, DA and HRA.		PSO ₁ , PSO ₂
	Write a script using AWK to calculate the Gross salary of every employee and also		
	calculate the average Gross salary.		
22.	Process related commands: Back ground process, use of nohup command.	MCA 392.6	PO_{1} , PO_{2} , PO_{3} , PO_{4}
			PSO ₁ , PSO ₂
			1, 2
	Beyond Syllabus topic:		
	Using system calls, write a program that displays the contents of a file in uppercase.		
	The file name is supplied as argument. How will you find out the ASCII values of the		
	alphabetic characters using another program?		