

# **UNIX AND SHELL PROGRAMMING**

**(BCAC 691)**

**LAB ASSIGNMENTS**

**BCA (III YEAR VI SEM)**

***DEPARTMENT OF COMPUTER APPLICATIONS***

**CONTAI COLLEGE OF LEARNING & MANAGEMENT SCIENCE**

**Affiliated to: MAKAUT, College Code: 340**

**Purba Medinipur, West Bengal-721401**

**NAME:**

**UNIVERSITY ROLL NO:**

**UNIVERSITY REGISTRATION NO:**

**SESSION:**

## Unix and Shell Programming Lab (BCAC691) Manual

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Assign ment	SL No	List of Programs	Teacher Sign.
Assignment – 1	1	Display the calendar for the month of February 2022.	
	2	Find out the current system date and time in UNIX.	
	3	Display the message "Hello, world!" in the terminal.	
	4	Perform a calculation such as adding 5 and 3, what command would you use?	
	5	Change your current password in UNIX.	
	6	How can you determine who is currently logged into the system?	
	7	What command would you use to retrieve system information such as the operating system name and version?	
	8	If you want to know the file name of the terminal connected to the standard input, what command would you use?	
	9	list the contents of a directory in UNIX?	
	10	Display the file permissions of a specific file in UNIX?	
	11	Copy a file named "example.txt" to another directory.	
	12	Create a new directory named "documents" in UNIX.	
	13	Move a file named "report.txt" to another directory.	
	14	Remove a file named "temp.txt" from the filesystem	
	15	Display the contents of a text file named "sample.txt" in the terminal.	
	16	Search a specific word in a text file named "document.txt". What command would you use for this task?	

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Assign ment	SL No	List of Programs	Teacher Sign.
Assignment – 2	1	How can you display the pathname of the current directory in UNIX?	
	2	How do you change the current directory in UNIX?	
	3	How can you create a new directory in UNIX?	
	4	How do you remove a directory in UNIX?	
	5	Show the inode number of a file named file4.txt	

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Assignment – 3	1	Unix Commands : who, pwd, mkdir, rmdir, cd, ls, touch, cp, mv, rm.	
	2	chmod, cal, file, sort, grep, man, lpr, passwd, clear, history.	
	3	cat, date, echo, ftp, head, more, tail, tar, wc, find.	
	4	awk, nano, gzip, unzip, ifconfig, mount, host, wait, sleep.	
	5	sed, shutdown, kill.	

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Assign ment	SL No	List of Programs	Teacher Sign.
Assignment – 4	1	<pre>lab_directory/ ├── file1.txt ├── file2.txt └── sub_directory/     ├── file3.txt     └── file4.txt</pre> <ul style="list-style-type: none"> <li>❖ Make this file and directory.</li> <li>❖ List the attributes (permissions, ownership, size, modification time) of all files and directories in the lab_directory.</li> <li>❖ Change the permissions of file3.txt to -w-r----x using absolute permission methods.</li> </ul>	
	2	Create a new user 'cobra' and create a new group 'nasma'.	
	3	Change the ownership of file2.txt to user 'cobra' and group 'nasma'.	
	4	Create a soft link under subdirectory, named 'intel_soft' for the file india.txt which present in home/user.	
	5	Create a hard link under subdirectory, named "cclms_hard" for the file india.txt which present in home/user.	
	6	Check the current umask value of your user. Change the umask value to 044. Create a new file named umask_test.txt and verify its permissions.	
	7	Modify the access times 2023 september 05 09:29min 35sec files using touch command.	

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Assign ment	SL No	List of Programs	Teacher Sign.
Assignment – 5	1	How would you display the attributes of processes?	
	2	Write a C program to create child process and allow parent process to display parent and the child to display child on the screen?	
	3	Write a C program to create zombie process?	
	4	Write a C program to illustrate how an orphan process is created?	
	5	Write a C program that illustrate communication between two process using unnamed pipes?	
	6	Write a C program that receives a message from message queue and display them?	

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Assign ment	SL No	List of Programs	Teacher Sign.
Assignment – 6	1	Write a shell script to display date and time?	
	2	Write a shell script to display your name?	
	3	Write a shell script to add two number?	
	4	Write a shell script to multiply two number?	
	5	Write a shell script to create a for loop?	
	6	Write a shell script to calculate factorial?	
	7	Write a shell script to swap two numbers?	
	8	Write a shell script to create a function?	
	9	Write a shell script to create an array?	
	10	Write a shell script to count the length of a string?	
	11	Write a shell script to concatenate strings?	
	12	Write a shell script to read a file?	
	13	Write a shell script to delete a file?	
	14	Write a shell script to append to a file?	
	15	Write a shell script program to print the current process id?	