

LAB SCHEDULE

SEMESTER	: 4
CLASS	: CSE A
SUBJECT	: CS232 FREE AND OPEN SOURCE SOFTWARE LAB
FACULTY IN CHARGE	: KRISHNAPRASAD P.K
START DATE	: 28/01/19
END DATE	: 15/05/19

CYCLE I

- 1) Basic linux commands like :mkdir, cp, rm, wc,kill,,cat, etc...
- 2) Advanced Linux commands cut,ps,grep sort, cut ,ls etc

SHELL PROGRAMMING

- 3) Write a shell script to calculate simple interest.
- 4) Write a shell script to calculate salary from given basic.
Salary = basic + dp + da +hra +ma –pf
basic – to be taken as input
dp - 50 % of basic
da - 35 % of (basic + dp)
hra - 8 % of (basic + dp)
ma - 3 % of (basic + dp)
pf - 10% of (basic + dp)
- 5) Write a shell script to calculate the average of a set of N number.
- 6) Write a Unix shell script to find the sum of number to given number. Create an output file.
e.g. if entered number is 5 then write 1+2+3+4+5=15 into an output file op.txt.
- 7) Write a shell script to take two numbers from command line and show result of dividing small number with bigger number. Also note that it should not accept zero or negative number. If user enter zero or negative number then it should prompt to input correct number after displaying proper message.
- 8) Write a Unix Shell Script which prints the following
 - a. Current home directory.
 - b. Current user name.
 - c. The message "Today is :" with current date in MM/dd/yy format
 - d. The message "No of users logged in :" with total no of current logged in users
- 9) Write a shell script to create a menu driven scientific calculator.
- 10) Write a shell script that takes as command line input a number N ,a Word and a file name. If that word occurs more than N times, remove all occurrences of that word in the file.
- 11) Write a **menu driven** shell script to show various system configurations like
 - Currently logged user and his logname
 - Your current shell

- Your home directory
 - Your operating system type
 - Your current path setting
 - Your current working directory
 - Show Currently logged number of users (use who)
- 12) Write a **menu driven** shell script to show various system configurations like
- About your OS and version, release number, kernel version
 - Show all available shells
 - Show computer CPU information like processor type, speed etc
 - Show memory information
 - Show hard disk information like size of hard-disk, cache memory, model etc
 - File system (Mounted)
- 13) Write a script called addressBook.sh, that is to be called as “addressBook.sh studentData.txt ADD/SEARCH/DELETE/MODIFY admno”. studentData.txt has the format,” admno:name:branch:address:email:”. The script should
- check that the correct number of arguments was received and print an usage message if not,
 - check whether the studentData.txt file exists and print an error message if not,
 - check whether the admno is already in the file, and then either
 - print a message stating that the admno already existed,
- 14) Shell script to implement a script which kills every process which uses more than a specified value of memory or CPU
- 15) Write **menu driven** Shell script for scientific calculator (use bc) . Implement arithmetic expressions, Sin,Cos,Tan,power,square,square root.

CYCLE 2 PERL Programs

- 16) Format of mark.txt is “Regno:Name:SUB1-CODE:M1:SUB2-CODE:M2:SUB3-CODE:M3”. Prepare certificate files like BT2321.txt, where BT2321 is register number. Format of certificate is given below.
- ```

REGNO:BT2321
NAME:ANIL KUMAR
SUB1CODE 32 THREE TWO
SUB2CODE 30 THREE ZERO
SUB3CODE 31 THREE ONE
TOTAL NINE THREE

```
- Write perl script to implement the same.
- 17) Database table ADRESSBOOK (SLNO:INT,NAME:STRING,ADDRESS:STRING,MOB:STRING) is given. Write a perl script with menus, ADD,DELETE,UPDATE, to manage address book.
- 18) db3.sh take item code from user and write to file tmpRead.txt, which will be read by perl script db3.pl. Perl script search the database STOREDB(CODE,NAME,UNIT PRICE) and write the item detail into the file tmpWrite.txt. db3.sh calls the perl script db3.pl and processes the file created by the perl script db3.pl.