UNIX

Assignment- Day 1

- **Concept**: Basic commands in UNIX

- **Objective**: At the end of the assignment, participants will be able to:
    - Execute Basic Linux commands

- What are different ways of connecting to Linux/Unix server from windows client machine?
- Display system name (Linux) using Linux command.(Hint - **uname** command)
- Display kernel version using **uname** command.
- List all the files and sub directories of the /bin directory.
- Display all files and sub directories of /boot directory?
- What is **vmlinuz** in /boot directory?
- List all the files including hidden files in your current directory.
- Display name of system generated log files on the console.
- List all the files starting with letter 'r' in your current directory.
- List all the files having three characters in their names, from your current directory.
- Display only the login name and IP Address of the currently logged in users name.
- Display the date in MM/DD/YY format.

- Display the calendar for past, current and next month using one command.
- Display count of user logged in.
- Write a command to print the inodes of the files.
- List all the files with extension .doc in your current directory.
- List all the files having the first letter of their name within the range 'l' to's', from your current directory.
- Create a file text1 and read its input from keyboard.
- Copy the contents of file text1 to another file text2.
- Append the contents of file text2 to file text1.
- Count the number of files in the current directory.
- Display the output of command ls –l to a file and on the output screen.
- Find the number of users currently logged on to the system.
- Delete all the files with their names starting with "tmp".
- List only the directories in your current directory

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Assignment- Day 2

- **Concept**: File comparison Commands, File Access Permission Commands, sort, cut, paste, command substitution

- **Objective**: At the end of the assignment, participants will be able to understand and implement:
  - Using basic **Unix** commands and filters as building blocks
  - Shell overview

- What is the purpose of **.bash_profile** file?
- Count the total number of words and lines in file text1.
- Display the system date in following format:
-           Today is Friday, 30 Dec 16
- Display the name and count of the directories in the current directory.
- What do you mean by Unix Shell?
- Do you think Shell is not part of kernel? Provide explanation
- What is most common shell in UNIX/Linux? Provide few names
- What is the command to find all available shells in your system?
- What is command to find your current shell type?
- Display only username (login name) and their IP addresses on console.
- Display only files name and their size on the console.
- Display files name and its size having largest size in your current working directory.

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Assignment- Day 3

- **Concept**: vi Editor and grep family

- **Objective**: At the end of the assignment, participants will be able to
  - Use vi Editor
  - Use regular expressions and grep commands

- Section 1

  Create a file STUDENT.DAT with the below mentioned data:-

  Note :
  - Do NOT consider the headings as part of STUDENT.DAT file.
  - The fields should be comma separated.

Student ID,FNAME,LNAME,BIRTH
DATE,GENDER,MAJOR,GPA
987,PRAVEENA,BHUTKAR,03-MAR-72,F,MGT,3.2
763,PURVA,ARYA,05-APR-70,F,FIN,2.7
218,RICHARDS,BENEDICT,20-MAY-73,M,ACC,2.4
359,PALLAVI,JOSHI,20-JUN-67,F,FIN,3.6
862,KIRAN,YADAV,07-JUL-75,M,MGT,2.2
748,MANISH,KULKARNI,08-SEP-71,M,MGT,2.8
506,LEE,FRANCIS,03-MAR-72,M,FIN,2.7
581,GAURI,KANETKAR,30-MAR-72,F,MKT,3.8
372,MAYA,GANDHI,03-APR-70,F,MKT,3.5
126,ANIL,LAMBA,09-OCT-72,M,ACC,3.7

a. Write a command to display students whose major is MGT

b. Sort the students on GPA on Ascending Order

c. Display the 5th, 6th and the 7th record only

d. Write a command which will store only the FNAME and LNAME in NAMES.DAT

e. Write a command which will store only the GPA in GPA.DAT

f. Merge Contents of NAMES.DAT & GPA.DAT in FINAL.DAT

- Section 2

  Create a file **project_costing.dat** with the below mentioned data-

  idu_name;project_name;hours_worked;associate_name;extra_hour_worked;project_status

  ESG;Spark;118;Ram;400;Y
  ATT;Spectrum ;232;Shyam;13;N
  US;Easy;565;Vishal;90;N
  EUROPE;Mobile;782;Tom;92;Y
  BT;Petrov;127;Steven;78;N
  ESG;Billing;902;James;789;Y
  ATT;Csg;232;Scott;67;N
  ESG;Npp;455;Tiger;6452;Y

a. Display all the lines with **project_status** marked as **Y**
b. Display **associate_name** in descending order
c. Display top 2 **associate_name** with highest **hours_worked**
d. Display all the records where **project_name** starts from letters **A-**

- Section 3

  Create a file **customer_data.dat** with the below mentioned data without headings:-

  CELL_NUMBER,CUSTOMER_NAME,TALK_DURATION_IN_HOURS,OPERATOR
  9842205567,JAMES,20,VODAFONE
  9889889889,NEHA,20,DOLPHIN
  9322874116,SUYASH,15,RELIANCE
  8731231231,RAM,20,DOLPHIN
  2222222222,BABA,210,RELIANCE
  6548123423,VINITA,108,VODAFONE
  8096116511,MAHESH,11,RELIANCE
  1181223245,NEETU,30,DOLPHIN

  a. Display all the CUSTOMER_NAME where the TALK_DURATION is less than 100
  b. Sort the CUSTOMER_NAME on the basis of first 3 characters in descending order
  c. Display CUSTOMER_NAMES, whose CELL_NUMBER contain consecutive 2s.
  d. Display lines having either DOLPHIN or RELIANCE number
  e. Do not display the lines where operator is RELIANCE

- Section 4
  - How will you check if FTP service is running or not?
  - Transfer a given file from Windows system to Linux system and vice versa
  - How will you find process-id of a process
  - How will you kill a process in Linux?