**Terminal Commands Assignment**

**QUE 1) Get user info from etc/passwordFile and change ownership of users home directory.**

**Sol:-**

**a)view etc/passwordFile.**

$ mkdir etc

$ cd etc/

$ touch passwordFile.txt

$ ls

**b)print the first field from etc/passwordFile.**

$ Nano passwordFile.txt

Hello World!!

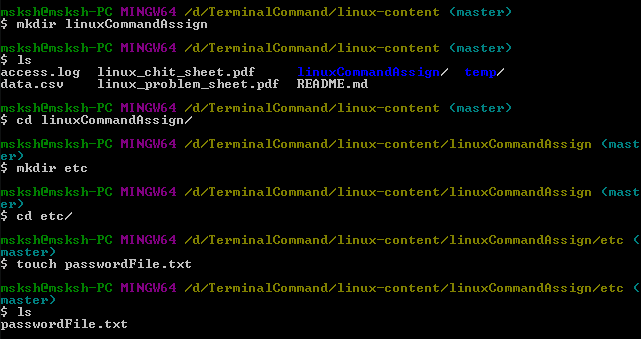
This is My Password File!!

$ head -1 passwordFile.txt

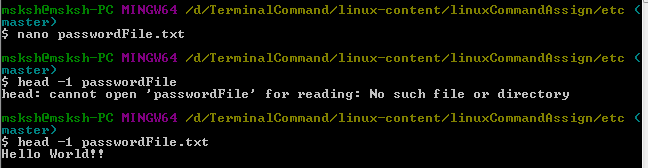
**c)print all data where Basepay>100000.**

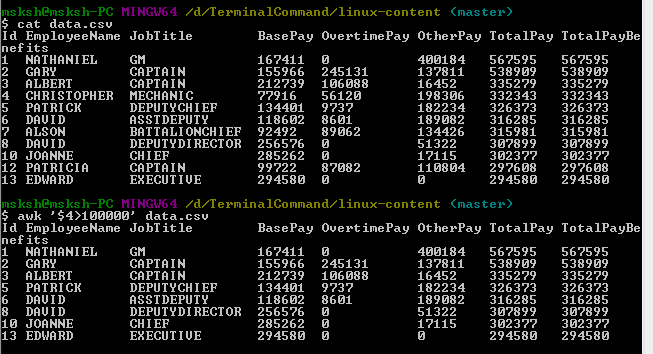
$ cat data.csv

$ awk ‘$4>100000’ data.csv



a22.PNG





**Que 2.)Move Files From One Folder To respective Folder**

1. **Create files in current directory or any temporary directory .**

$ touch abc.txt def.txt ghi.txt jkl.txt

1. **Print list of files to move.**

$ ls –l

1. **Create folder .**

$ mkdir temp2

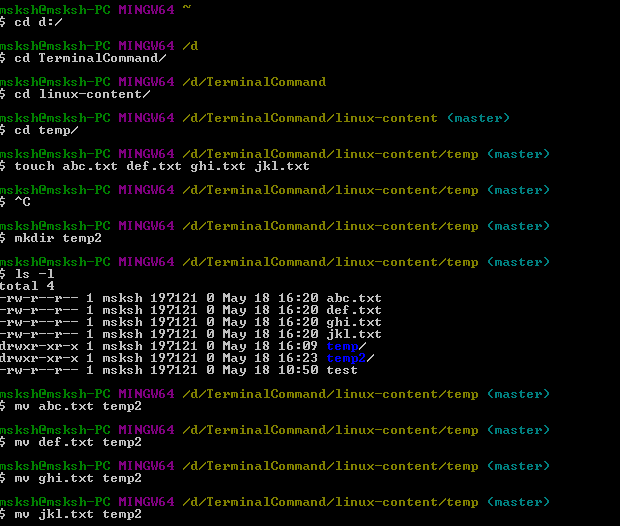
1. **Move file to newly created folder.**

$ mv abc.txt temp2

$ mv def.txt temp2

$ mv ghi.txt temp2

$ mv jkl.txt temp2



MoveFile2.PNG

**Que 3.) Append Current date to all log files name which has extention .log.1 from a folder**

**a)Create files with name abc.log.1, def.log.1, ghi.log.1, jkl.log.1, mno.log.**

$ touch abc.log.1 def.log.1 ghi.log.1 jkl.log.1 mno.log.1.

**b)Print list of files.**

$ ls

**c)Print date command show to show in ddmmyy.**

$ date +’%d-%m-%y’

**d)Append date to the log file name.**

$ mkdir logFiles

$ cp abc.log.1 logFiles

$ cp def.log.1 logFiles

$ cp ghi.log.1 logFiles

$ cp jkl.log.1 logFiles

$ cp mno.log.1 logFiles

$ cd logFiles/

$ ls –l

$ mv abc.log.1 abc-$(date +'%d-%m-%y').log

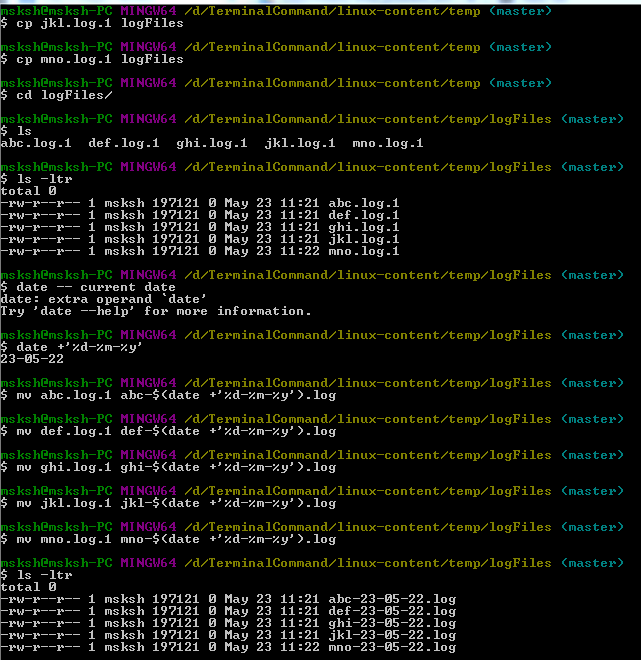
$ mv def.log.1 def-$(date +'%d-%m-%y').log

$ mv ghi.log.1 ghi-$(date +'%d-%m-%y').log

$ mv jkl.log.1 jkl-$(date +'%d-%m-%y').log

$ mv mno.log.1 mno-$(date +'%d-%m-%y').log

$ ls –l



**Que 5. Check if a Folder exists or not .If it’s not present, create it.**

**Sol:-**

1. touch folderExist.sh
2. nano folderExist.sh
3. #!/bin/bash -x

var=Madhuri

if [ -e $var ];

then

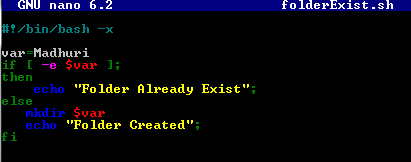
echo "Folder Already Exist";

else

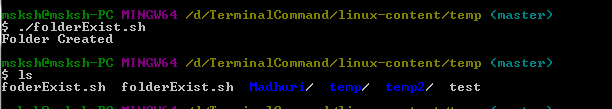
mkdir $var

echo "Folder Created";

fi



1. ./folderExist.sh



**Que 6. Execute Command “hello” and “ls” and check its execution status and print whether command executed successfully or not.**

**a)Execute Hello command at command prompt.**

touch hello.sh

nano hello.sh

echo “This is Hello file to execute”

**b)check execution status of “hello” command.**

./hello.sh

hello2.PNG

**c) Execute “ls” command at command prompt.**

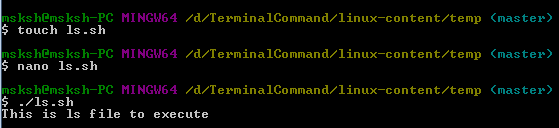
touch ls.sh

nano ls.sh

echo “This is ls file to execute”

**d)check execution status of “ls” command.**

./ls.sh



**Que 7.) Set Environment userset=” dH34xJaa23” .If its already not set**

**Sol:-**

**a)check whether environment variable usersecret assigned by any value.**

**b)print error if userset already set.**

**c) Set Environment variable usersecret to given value.**

$ if [ -z $usersecret ];

then

usersecret=dH34xJaa23

echo $usersecret

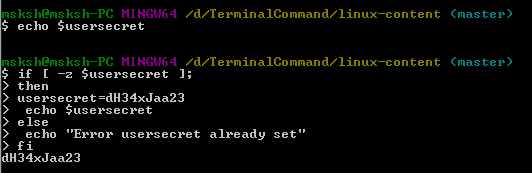
else

echo "Error usersecret already set"

fi

**Output:**

dH34xJaa23



**Que 8.) Use linux Command to search word and print occurrence**

**Sol:-**

$ cat access.log

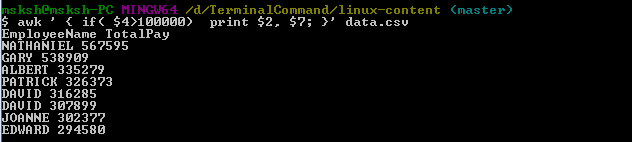
$ grep -c GET access.log

wordsearch.PNG

**Que9.) Data Analysis/Manipulation(AWK)**

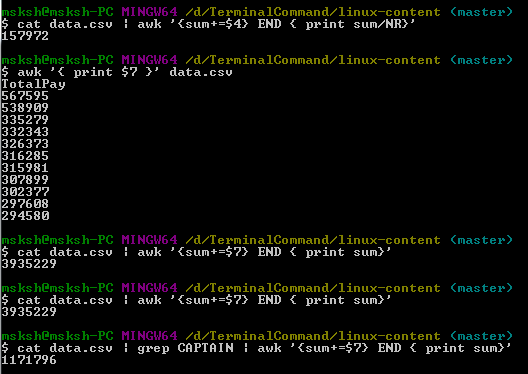
**1)Print EmployeeName and TotalPay who has basepay>100000**

$ awk ' { if( $4>100000) print $2, $7; }' data.csv



**2.)What is aggregate of TotalPay of Employees whose jobTitle is CAPTAIN.**

$ cat data.csv | grep CAPTAIN | awk '{sum+=$7} END { print sum}'



**4.)Print Average BasePay.**

$ cat data.csv | awk '{sum+=$4} END { print sum/NR}'

DM3.PNG

**Que 10) Print last 4 frequently access url count in sortrd order from acces.log**

**a.)View access.log.**

$ cat access.log

**b)Print field which has urls data**.

$ cat access.log | awk ‘{ print $15 }’

**c)Sort extracted urls and count it.**

$ cat access.log | awk '{ print NR, $15 }' | sort -n

**d)Print 4 uniue urls.**

$ cat access.log | awk '{ print $15 }' | sort -n | uniq | tail -4

**Que 11.) Print list of last frequently access unique urls at particular hours from access.log**

**a)View access log .**

$ cat access.log

**b)Print urls which has given time stamp.**

$ cat access.log | awk '{ print$4, " " $15 }'

**c)Sort extracted urls and count it.**

$ cat access.log | awk '{ print NR , " " $4, " " $15 }' | sort -n

**d)Print 4 uniue urls.**

$ cat access.log | awk '{ print NR , " " $4, " " $15 }' | sort -n | uniq | tail -4

**Que 12.) Print list of last 10 unique sorted client ip from access.log.**

$ cat access.log | awk '{ print NR , " " $1 }' | sort -n | uniq | tail -10