Terminal Command Practice Problem

Problem Statements

1. Get user info from /etc/passwd and change ownership of user's home directory.

    a. View /etc/passwd

```
$ ls -al /etc/passwd
ls: cannot access '/etc/passwd': No such file or directory
```

Note: In this section, for all the questions commands are not working.

2. Moves files from one folder to respective folder

    a. touch abc.txt def.txt ghi.txt.txt jkl.txt
    b. ls *.txt
       abc.txt def.txt jkl.txt
    c. Base Name

```
for file in `ls *.txt`;
do
        baseName=` echo $file | awk -F. '{print $1}'`;
        echo $baseName;
done
```

       Extension Name

```
for file in `ls *.txt`;
do
        extensionName=` echo $file | awk -F. '{print $2}'`;
        echo $extensionName;
done
```

    d.
```
for file in `ls *.txt`;
do
    folderName=` echo $file | awk -F. '{print $1}'`;
    mkdir $folderName;
done
```

e. for file in `ls *.txt`;
do
folderName=` echo $file | awk -F. '{print $1}'`;

mv $file $folderName

done

3. Append current date to all log files name which has extension .log.1 from a folder.

a. touch abc.log.1 def.log.1 ghi.log.1 jkl.log.1 mno.log.1
b. ls *.log.1
c. Base Name

```
for file in `ls *.log.1`;
do
        baseName=` echo $file | awk -F. '{print $1}'`;
        echo $baseName;
done
```

Extension Name

```
for file in `ls *.log.1`;
do
        extensionName=` echo $file | awk -F. '{print $1}'`;
        echo $extensionName;
done
```

d. command date +%d-%m-%Y
e. echo abc.log.1-"`date +"%d-%m-%Y"`"
f. for file in `ls *.log.1`;
do
echo $file-"`date +"%d-%m-%Y"`"
done

4. Archive the files from /var/log folder have modified 7 days ago and move it to your backup folder
a. find $DIR -mtime -7 -type f

b. destination="C:\Users\rites\OneDrive\Desktop\Bridgelabz\TerminalCommands\temp\backup"
for file in `find /var/log -type f -mtime +7`
do
cp $file $destination
done

5. Check if folder exists or not. If not present, create it.

```
#!/bin/bash -x

if [-d jerry]

then

        echo "Folder alredy exists"

else

        mkdir jerry

        echo "folder created"

fi
```

6. Execute command "hello" and "ls" and check its execution status and print whether command executed successful or not.

a. hello
bash: hello: command not found

b. S?
bash: 127: command not found

c. ls
abc.txt def.txt

d. S?
bash: 127: command not found

7. Set environment usersecret=”dH34xJaa23” if its already not set.

   a. env | grep usersecret

   b. It is not set yet.

   c. export usersecret=dh34xJaa23

      echo $usersecret

      dh34xJaa23

      env | grep usersecret

      usersecret=dh34xJaa23

8. Find a word “systemd” from all log files in the folder/var/log and print number of occurrence more than 0 against each file.

   $ grep -wc "systemd" access.log

9. Create process list table displays process id, parent process id,command name, % of memory consumption, % of cpu utilization.

   $ ps –f

10. Print last 4 frequently access urls count in sorted order from /var/log/httpd/access.log

    $ cat access.log | awk '{print $11}' | sort | uniq -c |sort -nr | tail -4

       4 http://fundoopush-dev.bridgelabz.com/wp-login.php

       2 http://fundoopush-dev.bridgelabz.com/.well-known/acme-challenge/4xM-Y1899BrBIJ76P5Er2sj2VhEtyi_DFvfo6xiMXXw

       1 https://fundoopush-dev.bridgelabz.com/dashboard/hashtags/animals

       1 https://fundoopush-dev.bridgelabz.com/dashboard/archive

11. Print list of last 4 frequently access unique urls at particular hours from /var/log/httpd/access.log

    $ cat access.log | awk '{print $4"["$11}' | sort | uniq -c | tail -4

    4 [30/Sep/2019:12:09:03["https://fundoopush-dev.bridgelabz.com/login"

    1 [30/Sep/2019:12:09:04["https://fundoopush-dev.bridgelabz.com/login"

    1 [30/Sep/2019:12:09:09["https://fundoopush-dev.bridgelabz.com/login"

    1 [31/Oct/2019:06:45:26[http://fundoopush-dev.bridgelabz.com/wp-login.php

12. Print list of web response code count in the unique sorted order at specific hours.

    $ cat access.log | awk '{print $9}' | sort | uniq -c | head -4
    ```
     3176 200
        8 206
       26 304
    ```

13. Print list of last 10 unique sorted client IP from /var/log/httpd/access.log
    $ cat access.log | awk '{print $1}' | sort | uniq -c | sort –nr | tail -4

14. Data analysis / manipulation (awk)

    a. Print EmployeeName and TotalPay who has basePay greater than 10000

    $ cat data.csv | awk '{if($4>10000) print $2 " " $7}'

    b. What is the aggregate TotalPay of employees whose jobtitle is ‘CAPTAIN’

    $ cat data.csv| grep CAPTAIN | awk '{sum+= $4}END{ print sum}'
    468427

    c. Print JobTitle and overtimePay who has Overtimepay is between 7000 and 10000.

    $ cat data.csv | awk '{ if($5>7000 && $5<10000) print $3" "$5}'
     DEPUTYCHIEF 9737
    ASSTDEPUTY 8601

    d.Print average BasePay.

    $ cat data.csv | awk '{sum+=$4} END {print sum/NR}'
    157972

PS: Some Commands are not working :-(

Thanks & Regards,
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