**Quiz 5\_Ashish Raymonds**

1. Write a script to delete blank lines in a file. Use cat and awk

Ans: awk 'NF > 0' filename

cat $file | egrep -v '^;|^$'

2. Write a script to delete duplicate lines

Ans:

$ cat dupl.sh

#!/bin/bash

TEMP="temp"`date '+%d%m%Y%H%M%S'`

touch $TEMP

while read line

do

grep -q "$line" $TEMP || echo $line >> $TEMP

done < $1

cat $TEMP

\rm $TEMP3. Write a shell script to delete a directory tree.

./script.sh <directory>

Ans: $ rm -rf DIRNAME

4. Write a shell script to see if a process is running.

Hint: Parse output of ps command

Ans:

#!/bin/sh

SERVICE="$1"

RESULT=`ps -a | sed -n /${SERVICE}/p`

if [ "${RESULT:-null}" = null ]; then

echo "not running"

else

echo "running"

fi

5. Write a shell script to display the following:

Hostname, disk space usage, free & used memory, uptime and logged in users.

Ans: Hostname:

#!/bin/bash

var=($( echo $1 | sed -e 's/^\([[:alnum:]]\*\)-\([[:alnum:]]\*\).\([[:alnum:]]\*\)\.[.[:alnum:]]\*$/\1 \2 \3 /g' ))

host=${var[0]}

group=${var[1]}

building=${var[2]}

printf "host=%s\ngroup=%s\nbuilding=%s\n" $host $group $building

exit 0

Disk space Usage:-

#!/bin/sh

df -H | grep -vE '^Filesystem|tmpfs|cdrom' | awk '{ print $5 " " $1 }' | while read output;

do

echo $output

usep=$(echo $output | awk '{ print $1}' | cut -d'%' -f1 )

partition=$(echo $output | awk '{ print $2 }' )

if [ $usep -ge 90 ]; then

echo "Running out of space \"$partition ($usep%)\" on $(hostname) as on $(date)" |

mail -s "Alert: Almost out of disk space $usep%" you@somewhere.com

fi

done.

Free and Used memory:-

$ cat mem.sh

#! /bin/bash

# Total memory space details

echo "Memory Space Details"

free -t -m | grep "Total" | awk '{ print "Total Memory space : "$2 " MB";

print "Used Memory Space : "$3" MB";

print "Free Memory : "$4" MB";

}'

echo "Swap memory Details"

free -t -m | grep "Swap" | awk '{ print "Total Swap space : "$2 " MB";

print "Used Swap Space : "$3" MB";

print "Free Swap : "$4" MB";

}'

Uptime and User:-

#!/bin/bash

#

function line(){

echo "Your username : $(echo $USER)"

echo "Uptime : $(echo $uptime)"

}

6. Write a shell script to display syntax of a given command

7. Write a shell to check if a command is in PATH directory list

8. Write a shell script to transfer a file using ftp and scp.

Read about how to use ftp and scp commands in scripts. Come up with your own example.

9. Write a shell script to delete files older than a week.

Ans :

#!/bin/bash

timestamp=$(date +%Y%m%d\_%H%M%S)

path="/data/backuplog"

filename=log\_back\_$timestamp.txt

log=$path/$filename

find $path -name "\*.txt" -type f -mtime +7 -print -delete >> $log

echo "Backup:: Script Start -- $(date +%Y%m%d\_%H%M)" >> $log

START\_TIME=$(date +%s)

10. Write a shell script to implement -i version of cp command

11. Write a shell script that Searches down the directory tree from current directory, change the group owner of files in a directory to another group.

You should also check if new group exists, else, error out.

./script.sh oldgroup newgroup

12. Write a shell script to list files in size order, smallest first.

Hint: ls and sort commands