**Create a script to fetch the list of all the users whose UID is greater than and less than 500**

**Script**

#!/bin/bash

echo "List of user whose uid is less than 500"

var=$(cat /etc/passwd | awk -F':' '{if ($3 < 500 ) print NR,$1 "--->"$3}')

echo "$var \n"

echo "List of user whose id is greater than 500"

var1=$(cat /etc/passwd | awk -F':' '{if ($3 > 500 ) print NR,$1"--->"$3}')

echo "$var1 \n"

**OUTPUT**

List of user whose uid is less than 500

1 root--->0

2 bin--->1

3 daemon--->2

4 adm--->3

5 lp--->4

6 sync--->5

7 shutdown--->6

8 halt--->7

9 mail--->8

10 operator--->11

11 games--->12

12 ftp--->14

13 nobody--->99

14 systemd-network--->192

15 dbus--->81

19 rpc--->32

23 abrt--->173

25 rtkit--->172

26 pulse--->171

27 radvd--->75

30 qemu--->107

31 tss--->59

33 usbmuxd--->113

35 ntp--->38

36 gdm--->42

37 rpcuser--->29

40 sshd--->74

41 avahi--->70

42 postfix--->89

43 tcpdump--->72 \n

List of user whose id is greater than 500

16 polkitd--->999

17 libstoragemgmt--->998

18 colord--->997

20 saned--->996

21 gluster--->995

22 saslauth--->994

24 setroubleshoot--->993

28 chrony--->992

29 unbound--->991

32 sssd--->990

34 geoclue--->989

38 nfsnobody--->65534

39 gnome-initial-setup--->988

44 akash--->1000

45 tom--->1001

46 edac--->1002 \n

**Create a script to fetch the list of all the users whose UID is less than 500. Output should have following format: username ---->>>> shell**

**SCRIPT**

#!/bin/bash

echo "List of user whose uid is less than 500"

var=$(cat /etc/passwd | awk -F':' '{if ($3 < 500 ) print NR,$1 "--->"$7}')

echo "$var \n"

echo "List of user whose id is greater than 500"

var1=$(cat /etc/passwd | awk -F':' '{if ($3 > 500 ) print NR,$1"--->"$7}')

echo "$var1 \n"

**OUTPUT:**

[akash@localhost edac]$ ./script4.sh

List of user whose uid is less than 500

1 root--->/bin/bash

2 bin--->/sbin/nologin

3 daemon--->/sbin/nologin

4 adm--->/sbin/nologin

5 lp--->/sbin/nologin

6 sync--->/bin/sync

7 shutdown--->/sbin/shutdown

8 halt--->/sbin/halt

9 mail--->/sbin/nologin

10 operator--->/sbin/nologin

11 games--->/sbin/nologin

12 ftp--->/sbin/nologin

13 nobody--->/sbin/nologin

14 systemd-network--->/sbin/nologin

15 dbus--->/sbin/nologin

19 rpc--->/sbin/nologin

23 abrt--->/sbin/nologin

25 rtkit--->/sbin/nologin

26 pulse--->/sbin/nologin

27 radvd--->/sbin/nologin

30 qemu--->/sbin/nologin

31 tss--->/sbin/nologin

33 usbmuxd--->/sbin/nologin

35 ntp--->/sbin/nologin

36 gdm--->/sbin/nologin

37 rpcuser--->/sbin/nologin

40 sshd--->/sbin/nologin

41 avahi--->/sbin/nologin

42 postfix--->/sbin/nologin

43 tcpdump--->/sbin/nologin \n

List of user whose id is greater than 500

16 polkitd--->/sbin/nologin

17 libstoragemgmt--->/sbin/nologin

18 colord--->/sbin/nologin

20 saned--->/sbin/nologin

21 gluster--->/sbin/nologin

22 saslauth--->/sbin/nologin

24 setroubleshoot--->/sbin/nologin

28 chrony--->/sbin/nologin

29 unbound--->/sbin/nologin

32 sssd--->/sbin/nologin

34 geoclue--->/sbin/nologin

38 nfsnobody--->/sbin/nologin

39 gnome-initial-setup--->/sbin/nologin

44 akash--->/bin/bash

45 tom--->/bin/bash

46 edac--->/bin/bash \n

**Create a script that asks for a process name from the user and displays its PID**

**SCRIPT**

[akash@localhost edac]$ cat script5.sh

#!/bin/bash

read -p "Enter the process name: " proc

var=$(cat /etc/passwd |pgrep "$proc"|uniq)

if [[ -n $var ]]

then

echo "ProcessId of $proc is $var"

else

echo "Process dose not exist"

fi

**OUTPUT**

[akash@localhost edac]$ ./script5.sh

Enter the process name: audit

ProcessId of audit is 95

675

[akash@localhost edac]$ ./script5.sh

Enter the process name: abc

Process dose not exist

[akash@localhost edac]$

**Create a script that asks for a file name and displays its permissions**

**Script:**

[akash@localhost edac]$ cat script6.sh

#!/bin/bash

read -p "Enter a file name: " file

var=$(stat -c "%a" $file)

var2=$(stat -c "%A" $file)

echo "Permission of file is $var --->$var2"

**OUTPUT:**

[akash@localhost edac]$ ./script6.sh

Enter a file name: file1

Permission of file is 664 --->-rw-rw-r--

[akash@localhost edac]$

**Create a script that asks for a directory name and displays its size in MB**

**SCRIPT:**

[akash@localhost edac]$ cat script7.sh

#!/bin/bash

read -p "Enter Path " path

du --block-size=1M $path|head

**OUTPUT:**

[akash@localhost edac]$ ./script7.sh

Enter Path /home/akash

0 /home/akash/.mozilla/extensions

0 /home/akash/.mozilla/plugins

46 /home/akash/.mozilla/firefox/tje7fjmq.default-default/extensions

0 /home/akash/.mozilla/firefox/tje7fjmq.default-default/bookmarkbackups

0 /home/akash/.mozilla/firefox/tje7fjmq.default-default/storage/permanent/chrome/idb/3870112724rsegmnoittet-es.files

0 /home/akash/.mozilla/firefox/tje7fjmq.default-default/storage/permanent/chrome/idb/1451318868ntouromlalnodry--epcr.files

0 /home/akash/.mozilla/firefox/tje7fjmq.default-default/storage/permanent/chrome/idb/1657114595AmcateirvtiSty.files

0 /home/akash/.mozilla/firefox/tje7fjmq.default-default/storage/permanent/chrome/idb/3561288849sdhlie.files

1 /home/akash/.mozilla/firefox/tje7fjmq.default-default/storage/permanent/chrome/idb

1 /home/akash/.mozilla/firefox/tje7fjmq.default-default/storage/permanent/chrome

[akash@localhost edac]$

**Create a script that asks for a absolute path and tells you if that path is of a file or a directory. Output should be as follows:**

**Path ---> File or Directory (Any One)**

**SCRIPT:**

#!/bin/bash

read -p "Enter the path: " path

if [[ -f $path ]]

then

echo "$path ---> File"

elif [[ -d $path ]]

then

echo "$path --> Directory"

else

echo "Invalid Path"

fi

**OUTPUT:**

[akash@localhost edac]$ ./script8.sh

Enter the path: /home/akash/aka

/home/akash/aka --> Directory

[akash@localhost edac]$ ./script8.sh

Enter the path: /home/akash/aka/edac/file1

/home/akash/aka/edac/file1 ---> File

[akash@localhost edac]$

**Use grep to find out all lines start with ‘aaa’ and can’t have numbers in between.**

**Script:**

[akash@localhost edac]$ cat file2

Akash

AAAkash

aaa123nhaj

Anju

aabgtfc

Liu8

**OUTPUT**

[akash@localhost edac]$ cat file2|grep -i "^aaa[A-Za-z]"

AAAkash

[akash@localhost edac]$

**Write a script that asks for an input word from you and check the following conditions for your input:**

**It should have:**

**Length – minimum of 8 characters.**

**Contain both alphabet and number.**

**Include both the small and capital case letters.**

**Script:**

#!/bin/bash

read var

echo $var|grep -P '(?=.\*[A-Z])(?=.\*[a-z])(?=.\*\W)(?=.\*\d){8}'

**OUTPUR**

[akash@localhost edac]$ ./file

Akash@123

Akash@123

[akash@localhost edac]$

**Write a shell script to get the current date, time, username and current working directory**

**SCRIPT**

#!/bin/bash

date

whoami

pwd

**OUTPUT**

[akash@localhost edac]$ ./script8.sh

Sun May 16 18:17:04 IST 2021

akash

/home/akash/aka/edac

[akash@localhost edac]$

**Creates a script that creates a user with password as per your choice**

**SCRIPT**

#!/bin/bash

cat /etc/passwd|tail -n 3

echo

read -p "Enter user name " usernm

useradd $usernm

read -s -p "Enter your password " pas

echo

echo $pas|passwd $usernm --stdin

echo

echo "User added successfully"

cat /etc/passwd|tail -n 3

**OUTPUT**

[root@localhost edac]# ./script10.sh

tcpdump:x:72:72::/:/sbin/nologin

akash:x:1000:1000:Akash:/home/akash:/bin/bash

edac:x:1001:1001::/home/edac:/bin/bash

Enter user name anju

Enter your password

Changing password for user anju.

passwd: all authentication tokens updated successfully.

User added successfully

akash:x:1000:1000:Akash:/home/akash:/bin/bash

edac:x:1001:1001::/home/edac:/bin/bash

anju:x:1002:1002::/home/anju:/bin/bash