8.1 Write a shell script to save all usernames and their id number in your system to a file userid.

cut -d ":" -f 1,3 /etc/passwd > userid

```
alan@DESKTOP-N0TVOD0: /mnt/e/networklab/shell_program
alan@DESKTOP-NOTVODO:/mnt/e/networklab/shell program$ bash 8 1.sh
alan@DESKTOP-NOTVODO:/mnt/e/networklab/shell program$ cat userid
root:0
daemon:1
bin:2
sys:3
sync:4
games:5
man:6
lp:7
mail:8
news:9
uucp:10
proxy:13
www-data:33
backup:34
list:38
irc:39
gnats:41
nobody:65534
systemd-network:100
systemd-resolve:101
systemd-timesync:102
messagebus:103
syslog:104
_apt:105
tss:106
uuidd:107
tcpdump:108
sshd:109
landscape:110
pollinate:111
alan@DESKTOP-NOTVODO:/mnt/e/networklab/shell program$ _
```

8. .2 Write a shell script to create a simple calculator

```
echo "Menu";
echo "1.addition";
echo "2.Substraction";
echo "3.Multiplication";
echo "4.Division";
echo "Select your option";
read opt;
echo "Enter 2 numbers";
read a b;
case $opt in
1) r=\$((\$a+\$b));
  echo "result=$r";
 ;;
2) r=$(($a-$b));
echo "result=$r";
3) r='expr $a \* $b';
echo "result=$r";
4) r=\$((\$a/\$b));
echo "result=$r";
*) echo "Invalid option";
esac
```

```
echo "Menu";
echo "1.addition";
echo "2.Substraction";
echo "3. Multiplication";
echo "4.Division";
echo "Select your option";
read opt;
echo "Enter 2 numbers";
read a b;
case $opt in
1) r=\$((\$a+\$b));
  echo "result=$r";
2) r=\$((\$a-\$b));
echo "result=$r";
3) r='expr $a \* $b';
echo "result=$r";
;;
4) r=$(($a/$b));
echo "result=$r";
;;
*) echo "Invalid option";
esac
```

```
alan@DESKTOP-N0TVOD0: /mnt/e/networklab/shell_program
alan@DESKTOP-NOTVODO:/mnt/e/networklab/shell program$ bash 8 2.sh
Menu
1.addition
2.Substraction
3.Multiplication
4.Division
Select your option
Enter 2 numbers
3 5
result=8
alan@DESKTOP-NOTVODO:/mnt/e/networklab/shell program$ bash 8 2.sh
Menu
1.addition
2.Substraction
3.Multiplication
4.Division
Select your option
Enter 2 numbers
5 6
result=30
alan@DESKTOP-NOTVODO:/mnt/e/networklab/shell_program$ bash 8_2.sh
Menu
1.addition
2.Substraction
3.Multiplication
4.Division
Select your option
Enter 2 numbers
50 10
result=5
```

alan@DESKTOP-NOTVODO:/mnt/e/networklab/shell_program\$