

REG- 16BIT0453

NAME- KRISHNA KUMAR MAHTO

EXP-1

a. Terminal command and output:

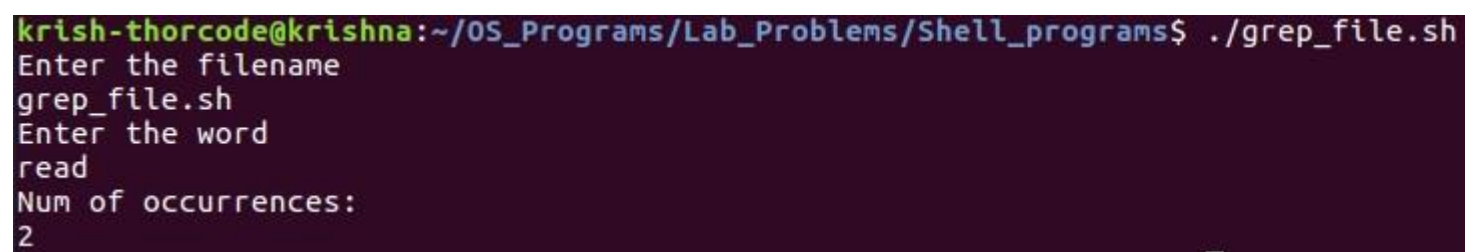
```
krish-thorcode@krishna: ~  
krish-thorcode@krishna:~$ cat /etc/passwd  
root:x:0:0:root:/root:/bin/bash  
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin  
bin:x:2:2:bin:/bin:/usr/sbin/nologin  
sys:x:3:3:sys:/dev:/usr/sbin/nologin  
sync:x:4:65534:sync:/bin:/bin/sync  
games:x:5:60:games:/usr/games:/usr/sbin/nologin  
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin  
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin  
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin  
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin  
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin  
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin  
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin  
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin  
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin  
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin  
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin  
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin  
systemd-timesync:x:100:102:systemd Time Synchronization,,,:/run/systemd:/bin/false  
systemd-network:x:101:103:systemd Network Management,,,:/run/systemd/netif:/bin/false  
systemd-resolve:x:102:104:systemd Resolver,,,:/run/systemd/resolve:/bin/false  
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,:/run/systemd:/bin/false  
syslog:x:104:108:/:/home/syslog:/bin/false  
_apt:x:105:65534:/:/nonexistent:/bin/false  
messagebus:x:106:110:/:/var/run/dbus:/bin/false  
uidd:x:107:111:/:/run/uidd:/bin/false  
lightdm:x:108:114:Light Display Manager:/var/lib/lightdm:/bin/false  
whoopsie:x:109:116:/:/nonexistent:/bin/false  
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/bin/false  
avahi:x:111:120:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/bin/false  
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/bin/false  
colord:x:113:123:colord colour management daemon,,,:/var/lib/colord:/bin/false  
speech-dispatcher:x:114:29:Speech Dispatcher,,,:/var/run/speech-dispatcher:/bin/false  
hplip:x:115:7:HPLIP system user,,,:/var/run/hplip:/bin/false  
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,:/bin/false  
pulse:x:117:124:PulseAudio daemon,,,:/var/run/pulse:/bin/false  
rtkit:x:118:126:RealtimeKit,,,:/proc:/bin/false  
saned:x:119:127:/:/var/lib/saned:/bin/false  
usbmux:x:120:46:usbmux daemon,,,:/var/lib/usbmux:/bin/false  
krish-thorcode:x:1000:1000:Krishna,,,:/home/krish-thorcode:/bin/bash  
vboxadd:x:999:1:/:/var/run/vboxadd:/bin/false  
nvidia-persistenced:x:121:129:NVIDIA Persistence Daemon,,,:/sbin/nologin
```

b.

Script code:

```
echo "Enter filename"  
read filename  
echo "Enter word"  
read word  
echo "Number of occurrences:"  
grep -cow "$word" "$filename"
```

OUTPUT:



```
krish-thorcode@krishna:~/OS_Programs/Lab_Problems/Shell_programs$ ./grep_file.sh  
Enter the filename  
grep_file.sh  
Enter the word  
read  
Num of occurrences:  
2
```

c. CODE:

```
echo "Enter a file name:"  
read f  
if [ -f $f ]  
then  
    echo "File"  
elif [ -d $f ]  
then  
    echo "Directory"  
else  
    echo "Invalid input"  
fi
```

OUTPUT:

```
krish-thorcode@krishna:~/OS_Programs/Lab_Problems/Shell_programs$ ./file_or_dir.sh
Enter a file name:
kk
Invalid input
krish-thorcode@krishna:~/OS_Programs/Lab_Problems/Shell_programs$ ./file_or_dir.sh
Enter a file name:
file_or_dir.sh
File
```

d. CODE:

```
echo -e "enter the user name :\c"
read usr
tuser=`who | tr -s " " | head -1 | cut -d " " -f1`
if [ "$tuser" = "$usr" ]
then
tm=`who | tr -s " " | head -1 | cut -d " " -f4`
uhr=`echo $tm | cut -d ":" -f1`
umin=`echo $tm | cut -d ":" -f2`
shr=`date "+%H"`
smin=`date "+%M"`
if [ $smin -lt $umin ]
then
shr=`expr $shr - 1`
smin=`expr $smin + 60`
fi
h=`expr $shr - $uhr`
m=`expr $smin - $umin`
echo "user name : $usr"
echo "login period : $h : $m"
else
echo "Invalid User"
```

fi

OUTPUT:

```
krish-thorcode@krishna:~/OS_Programs/Lab_Problems/Shell_programs$ ./duration.sh
enter the user name :krish-thorcode
user name : krish-thorcode
login period : 2 : 6
```

e. CODE:

```
while true
```

```
do
```

```
echo "*****MENU*****"
```

```
echo "
```

```
1. List of files.
```

```
2. Copying files.
```

```
3. Removing files.
```

```
4. Renaming files.
```

```
5. Linking files.
```

```
press [CTRL+C] TO EXIT"
```

```
echo "enter your choice "
```

```
read ch
```

```
case "$ch" in
```

```
1 ) echo "The list of file names."
```

```
ls
```

```
-
```

```
l || echo "These are file";;
```

```
2) echo "Enter the old filename."
```

```
read ofile
```

```
echo "Enter the new file name."
```

```
read nfile
```

```
cp $ofile $nfile && echo "Copied sucessfully." || echo "Copied is not possible." ;;
```

```
3 ) echo "Enter the file name to remove."
```

```
read rfile
```

rm

-

f \$rf

ile && echo "Successfully removed." ;;

4) echo "Enter the old file name."

read ofile

echo "Enter the new file name."

read nfile

mv \$ofile \$nfile && echo "The file \$ofile name re

named to \$nfile." || echo "You

cann't Rename the file.".;;

5) echo "Enter the original filename."

read ofile

echo "Enter the new filename to link a file."

read lfile

In \$ofile \$l

file && echo "Creat the linking file Sccessfully." || echo "You cann't Linking the file.";; *)

echo "Invalid option."

Echo " Enter correct choice."

esac

done

OUTPUT:

```
krish-thorcode@krishna: ~/OS_Programs/Lab_Problems/Shell_programs
krish-thorcode@krishna:~/OS_Programs/Lab_Problems/Shell_programs$ ./interactive_file_handling.sh
*****MENU*****
1. List of files.
2. Copying files.
3. Removing files.
4. Renaming files.
5. Linking files.
press [CTRL+C] TO EXIT
enter your choice
1
The list of file names.
duration.sh      interactive_file_handling.sh
file_or_dir.sh   renamed_using_interactive_file_handling_grep.sh
grep_file.sh
./interactive_file_handling.sh: line 16: -: command not found
./interactive_file_handling.sh: line 17: l: command not found
These are file
*****MENU*****
1. List of files.
2. Copying files.
3. Removing files.
4. Renaming files.
5. Linking files.
press [CTRL+C] TO EXIT
enter your choice
4
Enter the old file name.
renamed_using_interactive_file_handling_grep.sh
Enter the new file name.
grep.sh
The file renamed_using_interactive_file_handling_grep.sh name re
named to grep.sh.
*****MENU*****
1. List of files.
2. Copying files.
3. Removing files.
4. Renaming files.
5. Linking files.
press [CTRL+C] TO EXIT
enter your choice
```

f. CODE:

```
echo "enter the directory name"
```

```
read dir
```

```
if [ -d $dir ]
```

```
then
```

```
cd $dir
```

```
ls > f
```

```
exec < f
```

```
while read line
```

```
do
```

```
if [ -f $line ]
```

```
then
if [ -r $line -a -w $line -a -x $line ]
then
echo "$line has all permissions"
else
echo "files not having all permissions"
fi
fi
done
fi
```

OUTPUT:

```
krish-thorcode@krishna:~/OS_Programs/Lab_Problems/Shell_programs$ ./content_of_curr_dir.sh
enter the directory name
.
content_of_curr_dir.sh has all permissions
duration.sh has all permissions
files not having all permissions
file_or_dir.sh has all permissions
grep_file.sh has all permissions
files not having all permissions
interactive_file_handling.sh has all permissions
krish-thorcode@krishna:~/OS_Programs/Lab_Problems/Shell_programs$
```