

```
cmd Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ps -aux
USER          PID %CPU %MEM    VSZ RSS TTY      STAT START  TIME COMMAND
root           1  0.1  1.5 105836 15508 ?        Ss 19:02 0:02 /usr/lib/systemd/systemd --switched-root --system --deserialize 30
root           2  0.0  0.0     0   0 ?        S 19:02 0:00 [kthreadd]
root           3  0.0  0.0     0   0 ?        I< 19:02 0:00 [rcu_gp]
root           4  0.0  0.0     0   0 ?        I< 19:02 0:00 [rcu_par_gp]
root           5  0.0  0.0     0   0 ?        I< 19:02 0:00 [netns]
root           7  0.0  0.0     0   0 ?        I< 19:02 0:00 [kworker/0:0H-events_highpri]
root           9  0.0  0.0     0   0 ?        I< 19:02 0:00 [kworker/0:1H-events_highpri]
root          10  0.0  0.0     0   0 ?        I< 19:02 0:00 [mm_percpu_wq]
root          11  0.0  0.0     0   0 ?        I 19:02 0:00 [kworker/u30:1-events_unbound]
root          12  0.0  0.0     0   0 ?        I 19:02 0:00 [rcu_tasks_kthre]
root          13  0.0  0.0     0   0 ?        I 19:02 0:00 [rcu_tasks_rude_]
root          14  0.0  0.0     0   0 ?        I 19:02 0:00 [rcu_tasks_trace]
root          15  0.0  0.0     0   0 ?        S 19:02 0:00 [ksoftirqd/0]
root          16  0.0  0.0     0   0 ?        I 19:02 0:00 [rcu_preempt]
root          17  0.0  0.0     0   0 ?        S 19:02 0:00 [migration/0]
root          19  0.0  0.0     0   0 ?        S 19:02 0:00 [cpuhp/0]
root          21  0.0  0.0     0   0 ?        S 19:02 0:00 [kdevtmpfs]
root          22  0.0  0.0     0   0 ?        I< 19:02 0:00 [inet_frag_wq]
root          23  0.0  0.0     0   0 ?        S 19:02 0:00 [kauditfd]
root          24  0.0  0.0     0   0 ?        S 19:02 0:00 [khungtaskd]
root          25  0.0  0.0     0   0 ?        S 19:02 0:00 [oom_reaper]
root          26  0.0  0.0     0   0 ?        I< 19:02 0:00 [writeback]
root          27  0.0  0.0     0   0 ?        S 19:02 0:00 [kcompactd0]
root          28  0.0  0.0     0   0 ?        SN 19:02 0:00 [ksmd]
root          29  0.0  0.0     0   0 ?        SN 19:02 0:00 [khugepaged]
root          30  0.0  0.0     0   0 ?        I< 19:02 0:00 [cryptd]
root          31  0.0  0.0     0   0 ?        I< 19:02 0:00 [kintegrityd]
root          1090 0.0  1.2 19392 12036 ?        Ss 19:37 0:00 sshd: ec2-user [priv]

Windows Taskbar: Type here to search, PragmaEdge, File Explorer, Task View, Start, Taskbar icons, Weather (23°C Haze), Network (WIFI), Battery (01:10), Language (ENG), Date (22-03-2023)
```

```
cmd Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ date
Tue Mar 21 07:40:27 UTC 2023
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=53 time=0.639 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=53 time=0.803 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=53 time=0.748 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=53 time=0.710 ms

Windows Taskbar: Type here to search, PragmaEdge, File Explorer, Task View, Start, Taskbar icons, Weather (23°C Haze), Network (WIFI), Battery (01:12), Language (ENG), Date (22-03-2023)
```

```
cmd Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ date
Tue Mar 21 07:40:27 UTC 2023
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=53 time=0.639 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=53 time=0.803 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=53 time=0.748 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=53 time=0.710 ms
64 bytes from 8.8.8.8: icmp_seq=5 ttl=53 time=0.720 ms
64 bytes from 8.8.8.8: icmp_seq=6 ttl=53 time=0.700 ms
^C
--- 8.8.8.8 ping statistics ---
6 packets transmitted, 6 received, 0% packet loss, time 5153ms
rtt min/avg/max/mdev = 0.639/0.720/0.803/0.049 ms
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ping 8.8.8.8 &
[1] 1145
[ec2-user@ip-172-31-1-11 fifth]$ PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=53 time=0.718 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=53 time=0.736 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=53 time=0.787 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=53 time=0.715 ms

[ec2-user@ip-172-31-1-11 fifth]$ 64 bytes from 8.8.8.8: icmp_seq=5 ttl=53 time=0.763 ms
64 bytes from 8.8.8.8: icmp_seq=6 ttl=53 time=0.703 ms
64 bytes from 8.8.8.8: icmp_seq=7 ttl=53 time=0.726 ms

[ec2-user@ip-172-31-1-11 fifth]$ ping 8.8.8.8 &
[1] 1165
[ec2-user@ip-172-31-1-11 fifth]$ PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=53 time=0.712 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=53 time=0.741 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=53 time=0.761 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=53 time=0.745 ms
64 bytes from 8.8.8.8: icmp_seq=5 ttl=53 time=0.717 ms
64 bytes from 8.8.8.8: icmp_seq=6 ttl=53 time=0.726 ms
g
1165
[ec2-user@ip-172-31-1-11 fifth]$ 64 bytes from 8.8.8.8: icmp_seq=7 ttl=53 time=0.702 ms
64 bytes from 8.8.8.8: icmp_seq=8 ttl=53 time=0.717 ms
kill 64 bytes from 8.8.8.8: icmp_seq=9 ttl=53 time=2.48 ms
-164 bytes from 8.8.8.8: icmp_seq=10 ttl=53 time=0.761 ms
9 64 bytes from 8.8.8.8: icmp_seq=11 ttl=53 time=0.718 ms
1164 bytes from 8.8.8.8: icmp_seq=12 ttl=53 time=0.773 ms
65

[1]+ Stopped ping 8.8.8.8
[ec2-user@ip-172-31-1-11 fifth]$ kill -19 1165
```

```
cmd Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ps -aux | grep bash
ec2-user 1104 0.0 0.5 8544 5248 pts/0 Ss 19:37 0:00 -bash
ec2-user 1164 0.0 0.2 6408 2128 pts/0 S+ 19:43 0:00 grep --color=auto bash
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ping 8.8.8.8 &
[1] 1165
[ec2-user@ip-172-31-1-11 fifth]$ PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=53 time=0.712 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=53 time=0.741 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=53 time=0.761 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=53 time=0.745 ms
64 bytes from 8.8.8.8: icmp_seq=5 ttl=53 time=0.717 ms
64 bytes from 8.8.8.8: icmp_seq=6 ttl=53 time=0.726 ms
g
1165
[ec2-user@ip-172-31-1-11 fifth]$ 64 bytes from 8.8.8.8: icmp_seq=7 ttl=53 time=0.702 ms
64 bytes from 8.8.8.8: icmp_seq=8 ttl=53 time=0.717 ms
kill 64 bytes from 8.8.8.8: icmp_seq=9 ttl=53 time=2.48 ms
-164 bytes from 8.8.8.8: icmp_seq=10 ttl=53 time=0.761 ms
9 64 bytes from 8.8.8.8: icmp_seq=11 ttl=53 time=0.718 ms
1164 bytes from 8.8.8.8: icmp_seq=12 ttl=53 time=0.773 ms
65

[1]+ Stopped ping 8.8.8.8
[ec2-user@ip-172-31-1-11 fifth]$ kill -19 1165
```

```
c:\ Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ ps -aux | grep bash
ec2-user    1104  0.0  0.5   8544  5248 pts/0    Ss  19:37   0:00 -bash
ec2-user    1164  0.0  0.2   6408  2128 pts/0    S+  19:43   0:00 grep --color=auto bash
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ ping 8.8.8.8 &
[1] 1165
[ec2-user@ip-172-31-1-11 fifth]$ PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=53 time=0.712 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=53 time=0.741 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=53 time=0.761 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=53 time=0.745 ms
64 bytes from 8.8.8.8: icmp_seq=5 ttl=53 time=0.717 ms
64 bytes from 8.8.8.8: icmp_seq=6 ttl=53 time=0.726 ms
ping: sendmsg: Operation not permitted
[1]+  Stopped                  ping 8.8.8.8
[ec2-user@ip-172-31-1-11 fifth]$ kill -18 1165
[ec2-user@ip-172-31-1-11 fifth]$ 64 bytes from 8.8.8.8: icmp_seq=13 ttl=53 time=0.756 ms
64 bytes from 8.8.8.8: icmp_seq=14 ttl=53 time=0.746 ms
64 bytes from 8.8.8.8: icmp_seq=15 ttl=53 time=0.735 ms
```

```
c:\ Select ec2-user@ip-172-31-1-11:~/fifth
64 bytes from 8.8.8.8: icmp_seq=21 ttl=53 time=0.726 ms
64 bytes from 8.8.8.8: icmp_seq=22 ttl=53 time=0.757 ms
64 bytes from 8.8.8.8: icmp_seq=23 ttl=53 time=0.716 ms
64 bytes from 8.8.8.8: icmp_seq=24 ttl=53 time=0.783 ms
kill -18 116564 bytes from 8.8.8.8: icmp_seq=25 ttl=53 time=0.738 ms
64 bytes from 8.8.8.8: icmp_seq=26 ttl=53 time=0.763 ms
-19 64 bytes from 8.8.8.8: icmp_seq=27 ttl=53 time=0.735 ms
64 bytes from 8.8.8.8: icmp_seq=28 ttl=53 time=0.728 ms
64 bytes from 8.8.8.8: icmp_seq=29 ttl=53 time=0.715 ms
64 bytes from 8.8.8.8: icmp_seq=30 ttl=53 time=0.702 ms
ps aux | grep bash 64 bytes from 8.8.8.8: icmp_seq=31 ttl=53 time=0.711 ms
64 bytes from 8.8.8.8: icmp_seq=32 ttl=53 time=0.726 ms
64 bytes from 8.8.8.8: icmp_seq=33 ttl=53 time=0.747 ms
64 bytes from 8.8.8.8: icmp_seq=34 ttl=53 time=0.718 ms
64 bytes from 8.8.8.8: icmp_seq=35 ttl=53 time=0.735 ms
64 bytes from 8.8.8.8: icmp_seq=36 ttl=53 time=0.749 ms
64 bytes from 8.8.8.8: icmp_seq=37 ttl=53 time=1.17 ms
64 bytes from 8.8.8.8: icmp_seq=38 ttl=53 time=0.790 ms
kill64 bytes from 8.8.8.8: icmp_seq=39 ttl=53 time=0.775 ms
l -64 bytes from 8.8.8.8: icmp_seq=40 ttl=53 time=0.711 ms
64 bytes from 8.8.8.8: icmp_seq=41 ttl=53 time=0.731 ms
964 bytes from 8.8.8.8: icmp_seq=42 ttl=53 time=0.745 ms
64 bytes from 8.8.8.8: icmp_seq=43 ttl=53 time=0.755 ms
11664 bytes from 8.8.8.8: icmp_seq=44 ttl=53 time=0.771 ms
5
[1]+  Killed                  ping 8.8.8.8
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ kill -9 1165
```

```
 Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ while [ 2 -le $x ]; do echo " 2 is less than the $x "; done
```

```
ec2-user@ip-172-31-1-11:~/fifth
#!/bin/bash

tput setaf 1
echo -e "\t\t\t welcome to server management "
tput setaf 7

echo " select the option to perform operation "
echo " press 1 : to start chat "
echo " press 2 : to manage script "
echo " press 3 : to view calendar "
echo " press 4 : to transfer chat remotely "

read -p "enter your choice " option

echo $option

case $option in
    "1")
        read -p "enter port " port
        nc -l $port &
    ;;

    "2")
        read -p " enter ur password " myp
        echo $myp > /tmp/pass.txt
        echo " manage script "
        cat /tmp/pass.txt
        read -p "enter ur name " name
        echo $name
    ;;

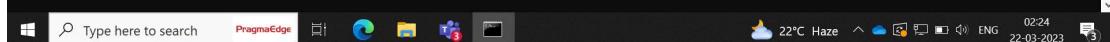
    "3")
        cal
    ;;

    "4")
        ;;
esac
-- INSERT --
```

35,3-10 Top



```
[ec2-user@ip-172-31-1-11 fifth]$ ./myadmin.sh
[ec2-user@ip-172-31-1-11 fifth]$ bash myadmin.sh
myadmin.sh: line 4: $'\n'myclear(): command not found
          welcome to server management
select the option to perform operation
press 1 : to start chat
press 2 : to manage script
press 3 : to view calendar
press 4 : to transfer chat remotely
enter your choice 2
2
enter ur password kanna@123#
manage script
kanna@123#
enter ur name kanna
kanna
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ cat /tmp/pass.txt
kanna@123#
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ here others can access the password from the file
```



```
cd Select ec2-user@ip-172-31-1-11:~/fifth
tput setaf 1
echo -e "\t\t\t welcome to server management "
tput setaf 7

echo " select the option to perform operation "
echo " press 1 : to start chat "
echo " press 2 : to manage script "
echo " press 3 : to view calendar "
echo " press 4 : to transfer chat remotely "

read -p "enter your choice " option
echo $option
case $option in
    "1")
        read -p "enter port " port
        nc -l $port &
        ;;
    "2")
        read -p " enter ur password " myp
        echo $myp > /tmp/pass.txt
        echo " manage script "
        cat /tmp/pass.txt
        read -p " enter ur name " name
        echo $name
        rm -f /tmp/pass.txt
        ;;
    "3")
        cal
        ;;
    "4")
        ;;
esac
-- INSERT --
```

44,1 57%



```
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ vi myadmin.sh
[ec2-user@ip-172-31-1-11 fifth]$ vi myadmin.sh
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ bash myadmin.sh
myadmin.sh: line 4: $'\nmyclear() {\n\techo -e n': command not found
welcome to server management
select the option to perform operation
press 1 : to start chat
press 2 : to manage script
press 3 : to view calendar
press 4 : to transfer chat remotely
enter your choice 2
2
enter ur password tom@123#
manage script
tom@123#
enter ur name tom
tom
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ cat /tmp/pass.txt
cat: /tmp/pass.txt: No such file or directory
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ here the file is removed after the complete process
```

here the file is removed after the complete process



```
cmd Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ bash myadmin.sh
myadmin.sh: line 4: $'\nmyclear() {\n\ntecho -e n': command not found
      welcome to server management
select the option to perform operation
press 1 : to start chat
press 2 : to manage script
press 3 : to view calender
press 4 : to transfer chat remotely
enter your choice 2
2
enter ur password pop@123#
manage script
pop@123#
enter ur name C
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ cat /tmp/pass.txt
pop@123#
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ here the password accessed by terminating the process( ctrl + c ) , before the remove command works
```

```
cmd Select ec2-user@ip-172-31-1-11:~/fifth
#!/bin/bash

myclear() {
    echo -e '\n ok bye see you next time ...'
    rm -f /tmp/pass.txt
    exit 1
}

trap myclear 2

tput setaf 1
echo -e "\t\t\t welcome to server management"
tput setaf 7

echo " select the option to perform operation "
echo " press 1 : to start chat "
echo " press 2 : to manage script "
echo " press 3 : to view calendar "
echo " press 4 : to transfer chat remotely "

read -p "enter your choice " option
echo $option
case $option in
    "1")
        read -p "enter port " port
        nc -l $port &
        ;;
    "2")
        read -p " enter ur password " myp
        ;;
```

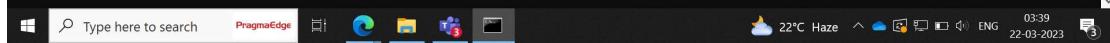
```
cmd Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ bash myadmin.sh
      welcome to server management
      select the option to perform operation
      press 1 : to start chat
      press 2 : to manage script
      press 3 : to View calender
      press 4 : to transfer chat remotely
      enter your choice 2
2
      enter ur password jack@123#
      manage script
      jack@123#
      enter ur name ^C
      ok bye see you next time ...
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ cat /tmp/pass.txt
cat: /tmp/pass.txt: No such file or directory
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ Here the file removed even by terminating the process by using myclear function and trap
```

```
cmd Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ expr 3 + 2
5
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ echo $(( 4 + 5 ))
9
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ page=2
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ while [ $page -le 8 ]
> do
> echo " the value of page at instant is $page "
> page=$(( $page + 1 ))
> done
the value of page at instant is 2
the value of page at instant is 3
the value of page at instant is 4
the value of page at instant is 5
the value of page at instant is 6
the value of page at instant is 7
the value of page at instant is 8
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$
```

```
cmd Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ while ping -c 1 8.8.8.8 > /dev/null
> do
> sleep 5
> echo " iam connected "
> done
iam connected
iam connected
```



```
cmd ec2-user@ip-172-31-1-11:~/fifth
while :
do
    echo -n " "
    sleep 2
    if ! ping -c 1 8.8.8.8 > /dev/null
    then
        echo " iam down "
    else
        echo " iam connected "
    fi
done
```



```
ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ bash pingtest.sh
iam connected
iam connected
iam connected
iam connected
iam connected
```

```
Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ls -l
total 8
-rw-r--r--. 1 ec2-user ec2-user 919 Mar 21 20:58 myadmin.sh
-rw-r--r--. 1 ec2-user ec2-user 155 Mar 21 22:07 pingtest.sh
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ls --all
. .. myadmin.sh pingtest.sh
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ls -a
. .. myadmin.sh pingtest.sh
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ls -a -i
16809631 . 12444 .. 16809004 myadmin.sh 16856365 pingtest.sh
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ls --block-size=1024
myadmin.sh pingtest.sh
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ getopt
[ec2-user@ip-172-31-1-11 fifth]$ getopt
getopt: missing optstring argument
Try 'getopt --help' for more information.
[ec2-user@ip-172-31-1-11 fifth]$
```

```
ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ getopt "ab" 5 10
-- 5 10
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ getopt "xy" -x -y
-x -y --
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ getopt "xy:" -x -y=4
-x -y =4 --
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ getopt "xy:z:" -x -y=5 -z=9
-x -y =5 -z =9 --
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ getopt -l "name: , age: , city: " --name=kanna --age 21 --city hyd
getopt: empty long option after -l or --long argument
Try 'getopt --help' for more information.
[ec2-user@ip-172-31-1-11 fifth]$ getopt -l "name: , age: , city: " --name=kanna --age 21 --city hyd
--age '21' --city 'hyd' --
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ getopt -l "name: , age: , city: " -o "n:a:c" -- -n=kanna --a 21 --c hyd
--name 'kanna' --age '21' --city 'hyd' --
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$
```

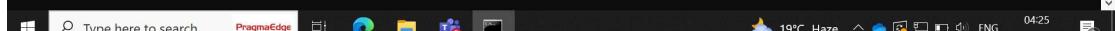


```
#!/bin/bash
name="kanna"
phone=2345
age=21

myusage() {
    echo " usage : -p , [ -c value ] , -n , -a "
}

# read -p "enter your choice : " ch

while getopts "n:p:a:c:" ch
do
    case $ch in
        n) echo $name
           ;;
        p) echo $phone
           ;;
        a) echo $age
           ;;
        c) echo $OPTARG
           ;;
        *) myusage
           break
    esac
done
"myodata.sh" 30L, 357B
```



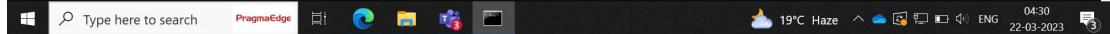
```
ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ vim myodata.sh
[ec2-user@ip-172-31-1-11 fifth]$ chmod 777 myodata.sh
[ec2-user@ip-172-31-1-11 fifth]$ ./myodata.sh -n
kanna
[ec2-user@ip-172-31-1-11 fifth]$ ./myodata.sh -p
2345
[ec2-user@ip-172-31-1-11 fifth]$ ./myodata.sh -a
21
[ec2-user@ip-172-31-1-11 fifth]$ ./myodata.sh -c
./myodata.sh: option requires an argument -- c
usage : -p , [ -c value ] , -n , -a
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ./myodata.sh -c hyd
hyd
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ ./myodata.sh -c -a -p -n
-a
2345
kanna
[ec2-user@ip-172-31-1-11 fifth]$ ./myodata.sh -c hyd -a -p -n
hyd
21
2345
kanna
[ec2-user@ip-172-31-1-11 fifth]$ 
```



```
Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ man shopt
[ec2-user@ip-172-31-1-11 fifth]$ shopt
autocd      off
assoc_expand_once    off
cdable_vars      off
cdspell       off
checkhash      off
checkjobs      off
checkwinsize   on
cmdhist       on
compat31      off

compat44      off
complete_fullquote   on

execfail      off
```



```
[ec2-user@ip-172-31-1-11 ~]$ /fifth
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ man shopt
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ shopt -s
checkwinsize    on
cmdhist         on
complete_fullquote   on
expand_aliases   on
extglob          on
extquote         on
force_fignore   on
globasicranges  on
histappend      on
interactive_comments  on
login_shell     on
progcomp         on
promptvars      on
sourcepath      on
[ec2-user@ip-172-31-1-11 fifth]$ date | tee b.txt
Tue Mar 21 10:59:41 PM UTC 2023
[ec2-user@ip-172-31-1-11 fifth]$ cat b.txt
Tue Mar 21 10:59:41 PM UTC 2023
[ec2-user@ip-172-31-1-11 fifth]$ 
[ec2-user@ip-172-31-1-11 fifth]$ cat /etc/fstab
UUID=f0bd585c-eec0-4c88-8363-17bb48dec559        /          xfs      defaults      0      0
UUID=0e52fc24-bd01-43ab-b0da-94784a3453a9        /boot      xfs      defaults      0      0
UUID=7B77-95E7  /boot/efi    vfat    defaults,uid=0,gid=0,umask=077,shortname=winnt  0      2
[ec2-user@ip-172-31-1-11 fifth]$
```

```
ec2-user@ip-172-31-1-11:~/fifth
#!/bin/bash

echo "the value of x is from the shell "
echo $x
~
```

```
ec2-user@ip-172-31-1-11:~/fifth
-bash: fg: current: no such job
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ x=12
[ec2-user@ip-172-31-1-11 fifth]$ vim a.sh
[ec2-user@ip-172-31-1-11 fifth]$ [ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ bash a.sh
the value of x is from the shell

[ec2-user@ip-172-31-1-11 fifth]$ x=45 &
[1] 22746
[ec2-user@ip-172-31-1-11 fifth]$ bash a.sh
the value of x is from the shell

[1]+  Done                  x=45
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$      for the first time the value is not printed since the process ID of bash is not same when
e to the second is same since we paused the bash.
```

```
ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ (y=10)
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ echo $y
9
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ x=9
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ (echo $x)
9
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ {z=4 ; }
-bash: syntax error near unexpected token `}'
[ec2-user@ip-172-31-1-11 fifth]${ z=4 ; }
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ echo $z
4
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$      here we can get the value of subprocess in the main process as first one but can get the
value of main process in subprocess as second and we can access the value of subprocess in main process using {}
```



```
ec2-user@ip-172-31-1-11:~/fifth
/home/ec2-user/fifth/p1.sh
/home/ec2-user/fifth/p2.sh

```
"p.sh" 3L, 55B 3,26 All

```

Windows taskbar: Type here to search, PragmaEdge, File Explorer, Edge, Task View, Start, 3 notifications, 19°C Haze, ENG, 05:07, 22-03-2023

```
Select ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ ls
a.sh b.txt myadmin.sh mydata.sh p1.sh p2.sh pingtest.sh p.sh
[ec2-user@ip-172-31-1-11 fifth]$ vim p1.sh
[ec2-user@ip-172-31-1-11 fifth]$ [ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ vim p2.sh
[ec2-user@ip-172-31-1-11 fifth]$ vim p.sh
[ec2-user@ip-172-31-1-11 fifth]$ vim p.sh
[ec2-user@ip-172-31-1-11 fifth]$ [ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ chmod +x p1.sh p2.sh
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ bash p.sh
iam job 1 0
iam job 1 1
iam job 1 2
iam job 1 3
iam job 1 4
iam job 1 5
iam job 2 0
iam job 2 1
^C
[ec2-user@ip-172-31-1-11 fifth]$ here the job 2 is runnig after job 1
```

Windows taskbar: Type here to search, PragmaEdge, File Explorer, Edge, Task View, Start, 3 notifications, 19°C Haze, ENG, 05:08, 22-03-2023

```
ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ [ec2-user@ip-172-31-1-11 fifth]$ [ec2-user@ip-172-31-1-11 fifth]$ vim p.sh [ec2-user@ip-172-31-1-11 fifth]$ [ec2-user@ip-172-31-1-11 fifth]$ bash p.sh [ec2-user@ip-172-31-1-11 fifth]$ iam job 2 0
iam job 1 0
iam job 2 1
iam job 1 1
iam job 2 2
iam job 1 2
iam job 2 3
iam job 1 3
iam job 2 4
iam job 1 4
iam job 2 5
iam job 1 5
```

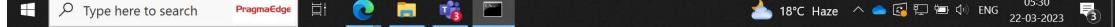
```
ec2-user@ip-172-31-1-11:~/fifth
echo " both jobs started "
/home/ec2-user/fifth/p1.sh &
/home/ec2-user/fifth/p2.sh &
wait
echo " both jobs runned successfully"
p.sh" 9L, 134B 9,0-1 All
```

```
[ec2-user@ip-172-31-1-11 ~]$ fifth
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ bash p.sh
both jobs started
iam job 2 0
iam job 1 0
iam job 2 1
iam job 1 1
iam job 2 2
iam job 1 2
iam job 2 3
iam job 1 3
iam job 2 4
iam job 1 4
iam job 2 5
iam job 1 5
both jobs runned successfully
[ec2-user@ip-172-31-1-11 fifth]$
```

```
ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ who
ec2-user pts/0 2023-03-21 19:37 (175.101.4.18)
[ec2-user@ip-172-31-1-11 fifth]$ who | cut -f1 -d:
ec2-user pts/0 2023-03-21 19
[ec2-user@ip-172-31-1-11 fifth]$ who | cut -f1 -d"
ec2-user
[ec2-user@ip-172-31-1-11 fifth]$ who | awk '{ print $1 }'
ec2-user
[ec2-user@ip-172-31-1-11 fifth]$ who | awk '{ print $1 ":" $3 }'
ec2-user:2023-03-21
[ec2-user@ip-172-31-1-11 fifth]$ who | awk '{ print $1 " : " $3 }'
ec2-user : 2023-03-21
[ec2-user@ip-172-31-1-11 fifth]$ who | awk '{ print $1 " : " $3 }'
ec2-user : 2023-03-21
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ date | awk '{ print $3 , $2 , $NF }'
21 Mar 2023
[ec2-user@ip-172-31-1-11 fifth]$ date | awk 'OFS="/" { print $3 , $2 , $NF }'
21/Mar/2023
[ec2-user@ip-172-31-1-11 fifth]$
```



```
ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$
[ec2-user@ip-172-31-1-11 fifth]$ ps | awk 'BEGIN { print "now process starts ..." } { print $1}'
now process starts ...
PID
1104
23212
23213
[ec2-user@ip-172-31-1-11 fifth]$ cat /etc/passwd | awk -F: '$3>=1000 { print $1 , $3}'
nobody 65534
ec2-user 1000
1001
[ec2-user@ip-172-31-1-11 fifth]$ cat /etc/passwd | awk -F: '$3<=1000 { print $1 , $3}'
root 0
bin 1
daemon 2
adm 3
lp 4
sync 5
shutdown 6
halt 7
mail 8
operator 11
games 12
ftp 14
systemd-coredump 999
dbus 81
polkitd 998
tss 59
sssd 997
chrony 996
```



```
ec2-user@ip-172-31-1-11:~/fifth
[ec2-user@ip-172-31-1-11 fifth]$ awk -F: '/bash$/ {print $1}' /etc/passwd
root
ec2-user
[ec2-user@ip-172-31-1-11 fifth]$ awk -F: '{print $1}' /etc/passwd | sort
adm
bin
chrony
daemon
dbus
ec2-user
ftp
games
halt
lp
mail
nobody
operator
polkitd
root
shutdown
sshd
sssd
sync
systemd-coredump
systemd-oom
tss
[ec2-user@ip-172-31-1-11 fifth]$ awk -F: '{print $1}' /etc/passwd | sort | uniq
```

