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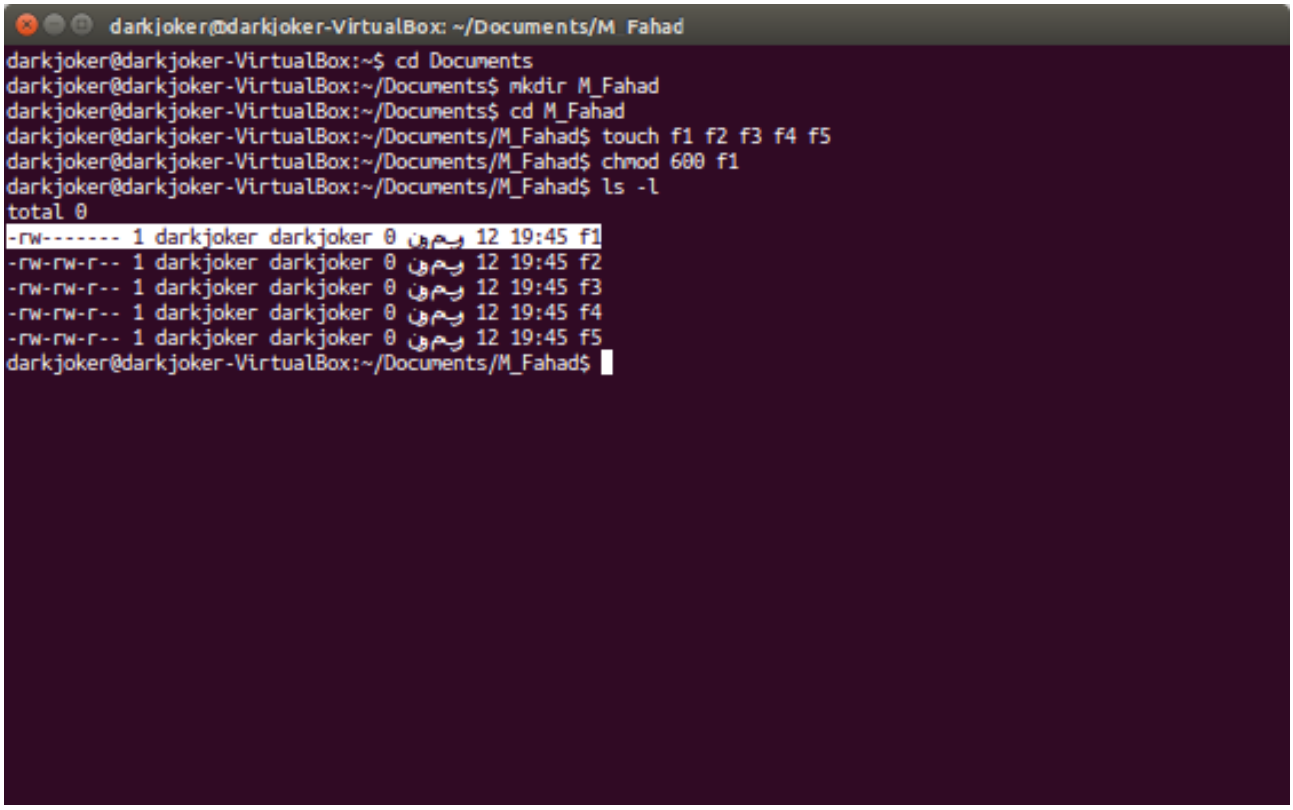
Id: FA19-BSSE-0014

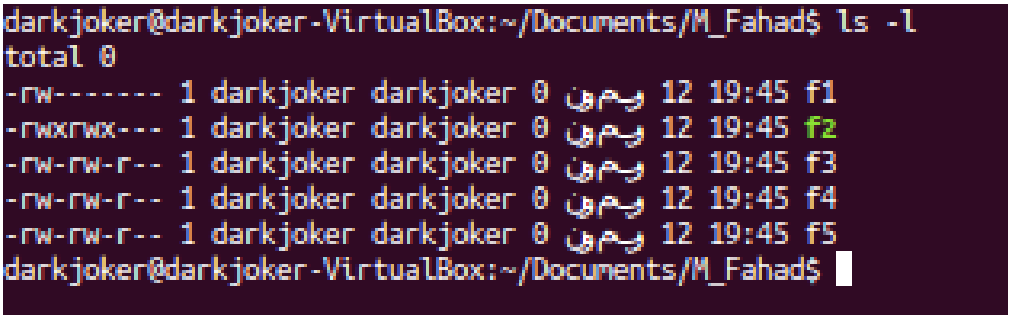
Course: Operating System Lab

Section: AM

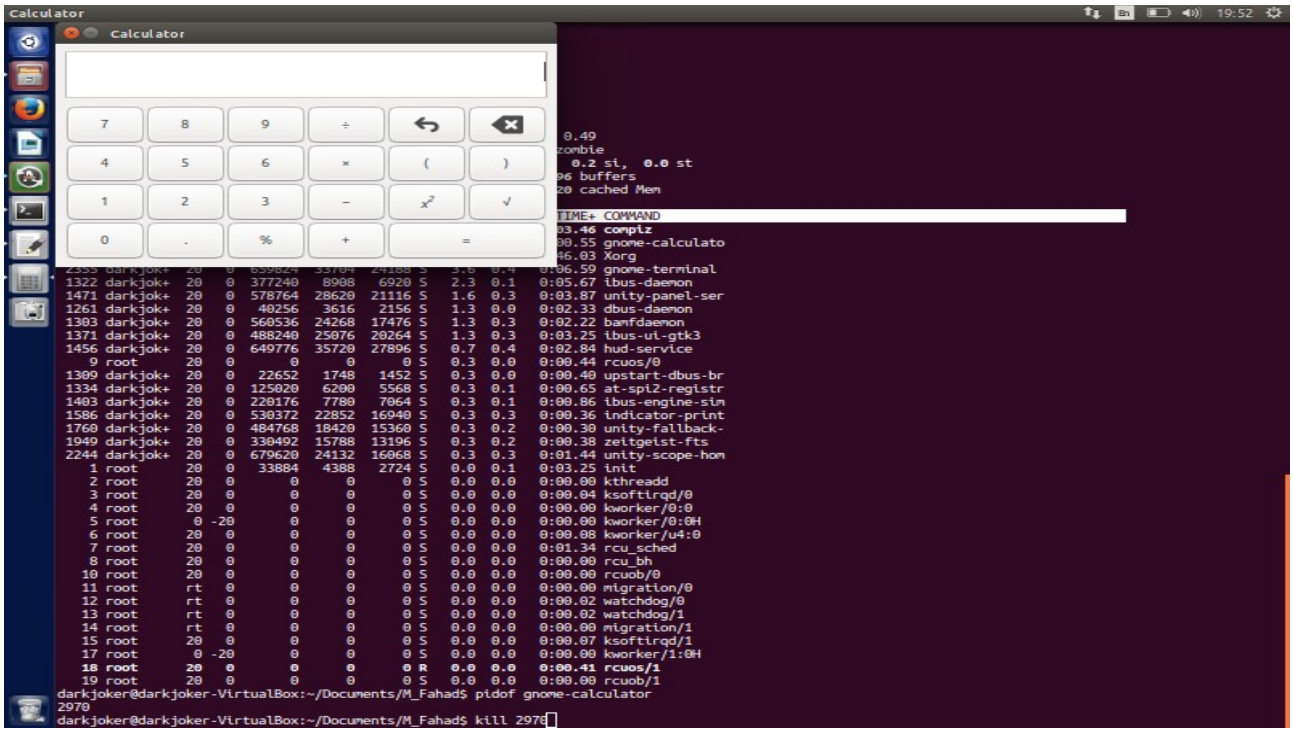
Assignment

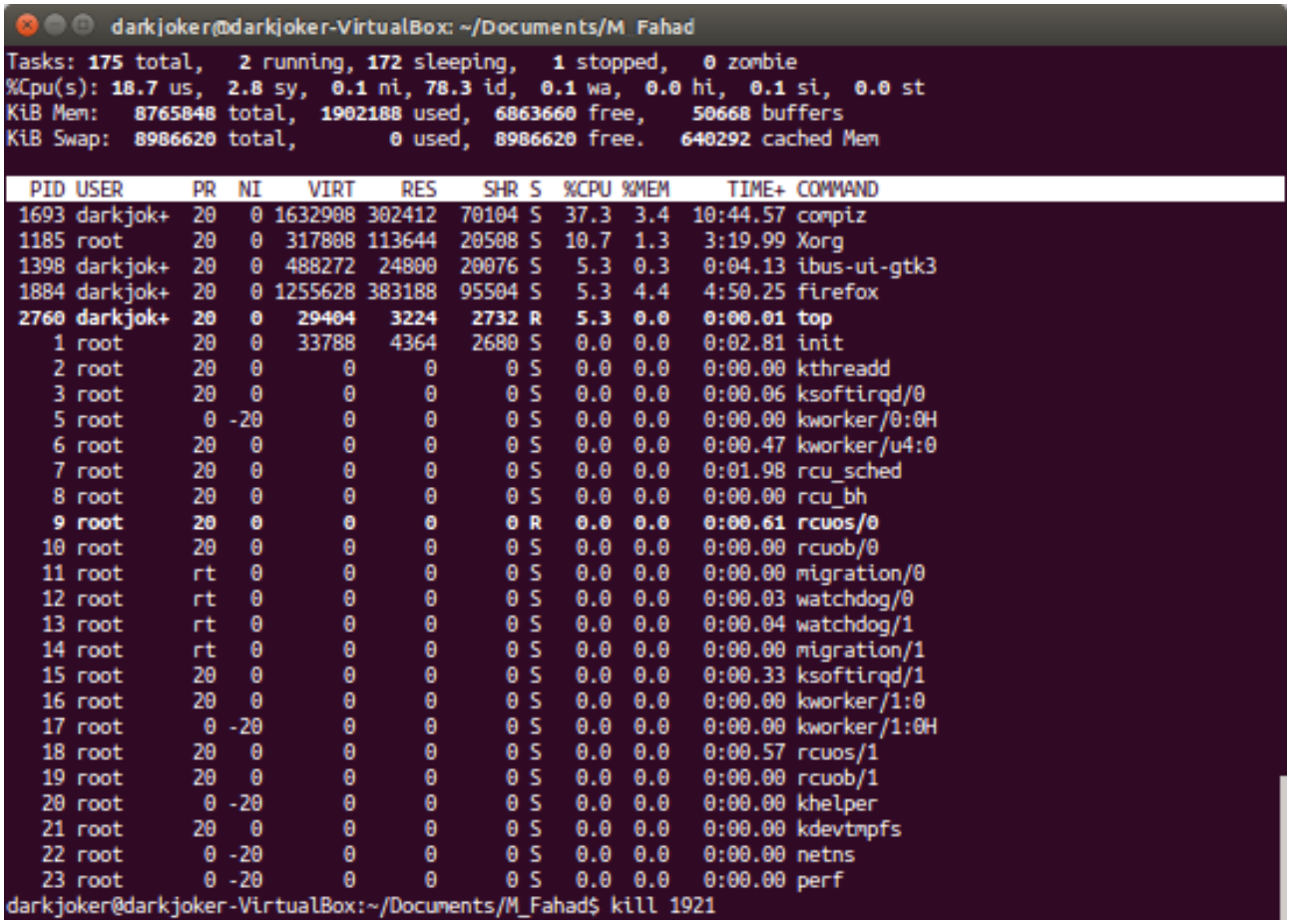
Question#1

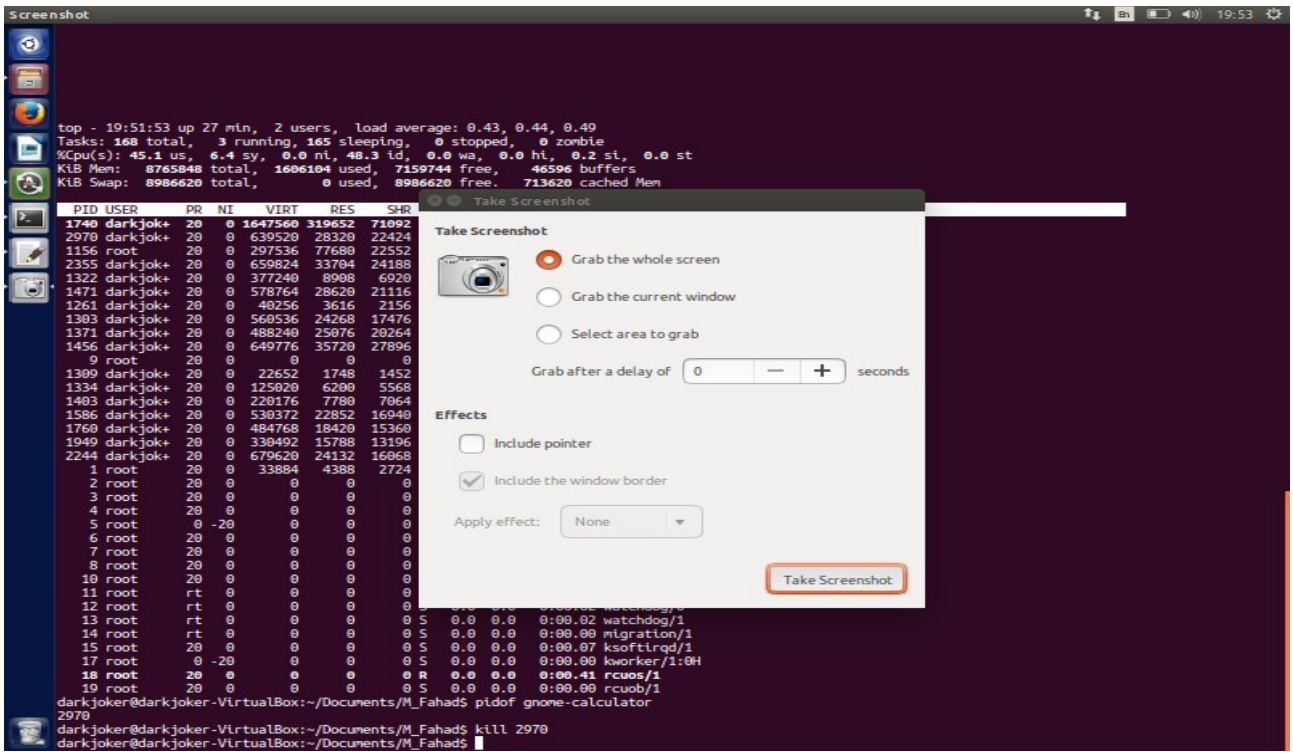


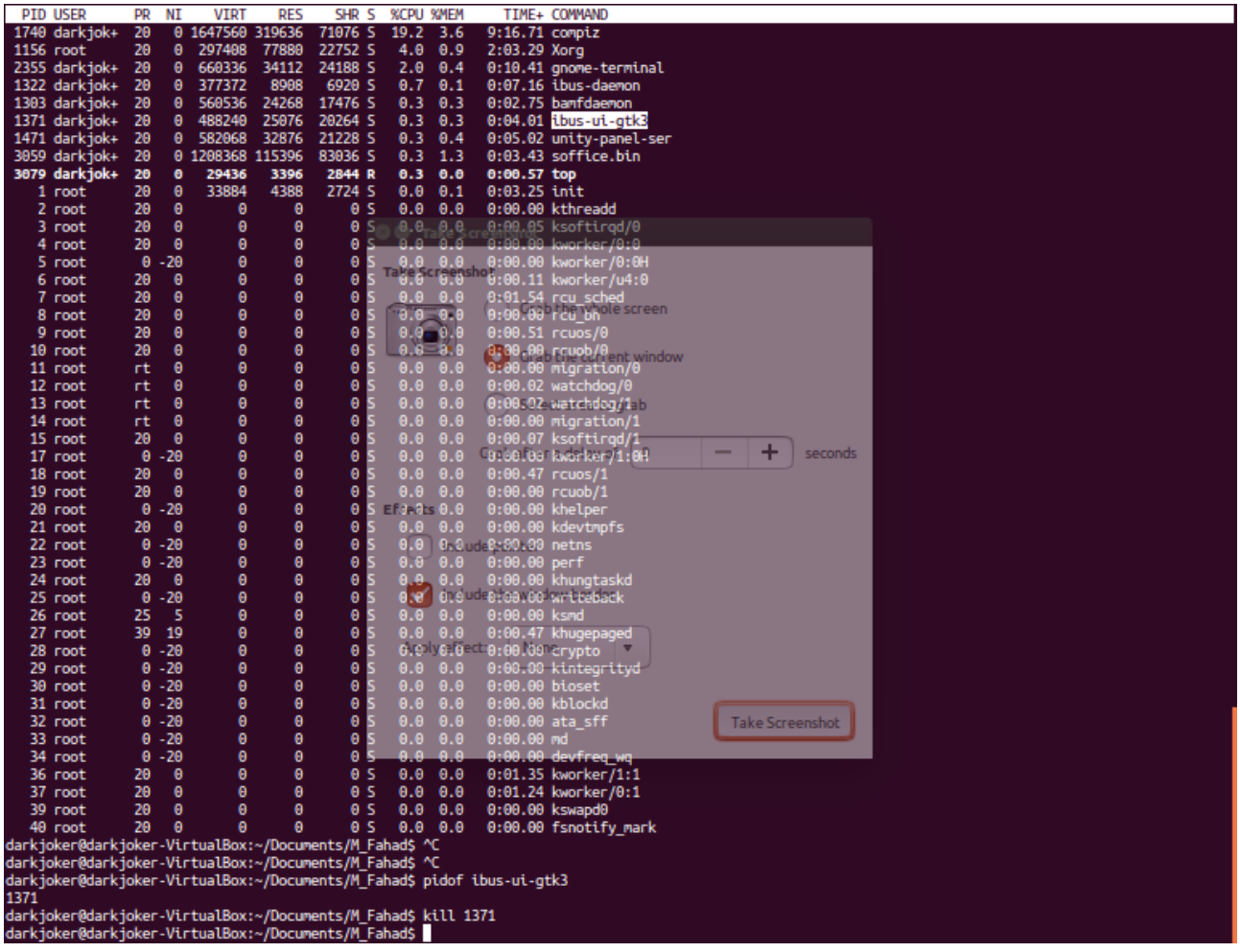


Question#2


Calculator
Calculator
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ pidof gnome-calculator
2970
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ kill 2976


darkjoker@darkjoker-VirtualBox: ~/Documents/M_Fahad
Tasks: 175 total, 2 running, 172 sleeping, 1 stopped, 0 zombie
%Cpu(s): 18.7 us, 2.8 sy, 0.1 ni, 78.3 id, 0.1 wa, 0.0 hi, 0.1 si, 0.0 st
KiB Mem: 8765848 total, 1902188 used, 6863660 free, 50668 buffers
KiB Swap: 8986620 total, 0 used, 8986620 free. 640292 cached Mem
PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND
1693 darkjok+ 20 0 1632908 302412 70104 S 37.3 3.4 10:44.57 compiz
1185 root 20 0 317808 113644 20508 S 10.7 1.3 3:19.99 Xorg
1398 darkjok+ 20 0 488272 24800 20076 S 5.3 0.3 0:04.13 ibus-ui-gtk3
1884 darkjok+ 20 0 1255628 383188 95504 S 5.3 4.4 4:50.25 firefox
2760 darkjok+ 20 0 29404 3224 2732 R 5.3 0.0 0:00.01 top
1 root 20 0 33788 4364 2680 S 0.0 0.0 0:02.81 init
2 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kthreadd
3 root 20 0 0 0 0 S 0.0 0.0 0:00.06 ksoftirqd/0
5 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 kworker/0:0H
6 root 20 0 0 0 0 S 0.0 0.0 0:00.47 kworker/u4:0
7 root 20 0 0 0 0 S 0.0 0.0 0:01.98 rcu_sched
8 root 20 0 0 0 0 S 0.0 0.0 0:00.00 rcu_bh
9 root 20 0 0 0 0 R 0.0 0.0 0:00.61 rcuos/0
10 root 20 0 0 0 0 S 0.0 0.0 0:00.00 rcuob/0
11 root rt 0 0 0 0 S 0.0 0.0 0:00.00 migration/0
12 root rt 0 0 0 0 S 0.0 0.0 0:00.03 watchdog/0
13 root rt 0 0 0 0 S 0.0 0.0 0:00.04 watchdog/1
14 root rt 0 0 0 0 S 0.0 0.0 0:00.00 migration/1
15 root 20 0 0 0 0 S 0.0 0.0 0:00.33 ksoftirqd/1
16 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kworker/1:0
17 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 kworker/1:0H
18 root 20 0 0 0 0 S 0.0 0.0 0:00.57 rcuos/1
19 root 20 0 0 0 0 S 0.0 0.0 0:00.00 rcuob/1
20 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 khelper
21 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kdevtmpfs
22 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 netns
23 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 perf
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ kill 1921


Screenshot
19:53
top - 19:51:53 up 27 min, 2 users, load average: 0.43, 0.44, 0.49
Tasks: 168 total, 3 running, 165 sleeping, 0 stopped, 0 zombie
%Cpu(s): 45.1 us, 6.4 sy, 0.0 ni, 48.3 id, 0.0 wa, 0.0 hi, 0.2 si, 0.0 st
KiB Mem: 8765848 total, 1606104 used, 7159744 free, 46596 buffers
KiB Swap: 8986620 total, 0 used, 8986620 free. 713620 cached Mem
PID USER PR NI VIRT RES SHR
1740 darkjok+ 20 0 1647560 319652 71092
2970 darkjok+ 20 0 639520 28320 22424
1156 root 20 0 297536 77680 22552
2355 darkjok+ 20 0 659824 33704 24188
1322 darkjok+ 20 0 377240 8908 6920
1471 darkjok+ 20 0 578764 28620 21116
1261 darkjok+ 20 0 40256 3616 2156
1303 darkjok+ 20 0 560536 24268 17476
1371 darkjok+ 20 0 488240 25076 20264
1456 darkjok+ 20 0 649776 35720 27896
9 root 20 0 0 0 0
1309 darkjok+ 20 0 22652 1748 1452
1334 darkjok+ 20 0 125020 6200 5568
1403 darkjok+ 20 0 220176 7780 7064
1586 darkjok+ 20 0 530372 22852 16940
1760 darkjok+ 20 0 484768 18420 15360
1949 darkjok+ 20 0 330402 15788 13196
2244 darkjok+ 20 0 679620 24132 16068
1 root 20 0 33884 4388 2724
2 root 20 0 0 0 0
3 root 20 0 0 0 0
4 root 20 0 0 0 0
5 root 0 -20 0 0 0
6 root 20 0 0 0 0
7 root 20 0 0 0 0
8 root 20 0 0 0 0
10 root 20 0 0 0 0
11 root rt 0 0 0 0
12 root rt 0 0 0 0
13 root rt 0 0 0 0 S 0.0 0.0 0:00.02 watchdog/1
14 root rt 0 0 0 0 S 0.0 0.0 0:00.00 migration/1
15 root 20 0 0 0 0 S 0.0 0.0 0:00.07 ksoftirqd/1
17 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 kworker/1:0H
18 root 20 0 0 0 0 R 0.0 0.0 0:00.41 rcuos/1
19 root 20 0 0 0 0 S 0.0 0.0 0:00.00 rcuob/1
Take Screenshot
Take Screenshot
Grab the whole screen
Grab the current window
Select area to grab
Grab after a delay of 0 seconds
Effects
Include pointer
Include the window border
Apply effect: None
Take Screenshot
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ pidof gnome-calculator
2970
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ kill 2970
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$

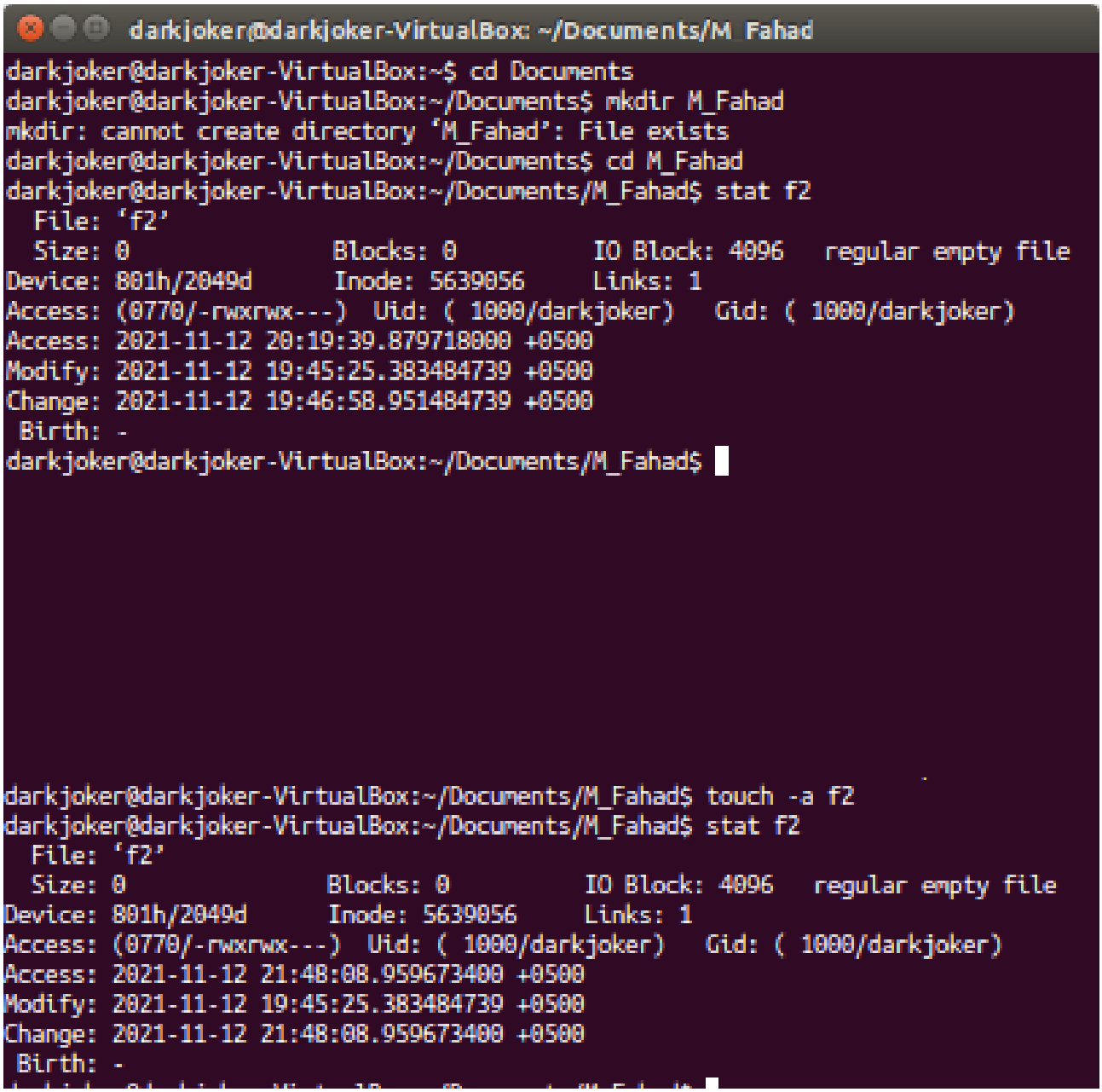

PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND
1740 darkjok+ 20 0 1647560 319636 71076 S 19.2 3.6 9:16.71 compiz
1156 root 20 0 297408 77880 22752 S 4.0 0.9 2:03.29 Xorg
2355 darkjok+ 20 0 660336 34112 24188 S 2.0 0.4 0:10.41 gnome-terminal
1322 darkjok+ 20 0 377372 8908 6920 S 0.7 0.1 0:07.16 ibus-daemon
1303 darkjok+ 20 0 560536 24268 17476 S 0.3 0.3 0:02.75 bamfdaemon
1371 darkjok+ 20 0 488240 25076 20264 S 0.3 0.3 0:04.01 ibus-ui-gtk3
1471 darkjok+ 20 0 582068 32876 21228 S 0.3 0.4 0:05.02 unity-panel-ser
3059 darkjok+ 20 0 1208368 115396 83036 S 0.3 1.3 0:03.43 soffice.bin
3079 darkjok+ 20 0 29436 3396 2844 R 0.3 0.0 0:00.57 top
1 root 20 0 33884 4388 2724 S 0.0 0.1 0:03.25 init
2 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kthreadd
3 root 20 0 0 0 0 S 0.0 0.0 0:00.05 ksoftirqd/0
4 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kworker/0:0
5 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 kworker/0:0H
6 root 20 0 0 0 0 S 0.0 0.0 0:00.11 kworker/u4:0
7 root 20 0 0 0 0 S 0.0 0.0 0:01.54 rcu_sched
8 root 20 0 0 0 0 S 0.0 0.0 0:00.00 rcu_bh
9 root 20 0 0 0 0 S 0.0 0.0 0:00.51 rcuos/0
10 root 20 0 0 0 0 S 0.0 0.0 0:00.00 rcuob/0
11 root rt 0 0 0 0 S 0.0 0.0 0:00.00 migration/0
12 root rt 0 0 0 0 S 0.0 0.0 0:00.02 watchdog/0
13 root rt 0 0 0 0 S 0.0 0.0 0:00.02 watchdog/1
14 root rt 0 0 0 0 S 0.0 0.0 0:00.00 migration/1
15 root 20 0 0 0 0 S 0.0 0.0 0:00.07 ksoftirqd/1
17 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 kworker/1:0H
18 root 20 0 0 0 0 S 0.0 0.0 0:00.47 rcuos/1
19 root 20 0 0 0 0 S 0.0 0.0 0:00.00 rcuob/1
20 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 khelper
21 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kdevtmpfs
22 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 netns
23 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 perf
24 root 20 0 0 0 0 S 0.0 0.0 0:00.00 khungtaskd
25 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 writeback
26 root 25 5 0 0 0 S 0.0 0.0 0:00.00 ksmd
27 root 39 19 0 0 0 S 0.0 0.0 0:00.47 khugepaged
28 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 crypto
29 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 kintegrityd
30 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 bioset
31 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 kblockd
32 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 ata_sff
33 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 md
34 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 devfreq_wq
36 root 20 0 0 0 0 S 0.0 0.0 0:01.35 kworker/1:1
37 root 20 0 0 0 0 S 0.0 0.0 0:01.24 kworker/0:1
39 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kswapd0
40 root 20 0 0 0 0 S 0.0 0.0 0:00.00 fsnotify_mark
Take Screenshot
Grab the whole screen
Grab the current window
seconds
Effects
Take Screenshot
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ ^C
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ ^C
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ pidof ibus-ui-gtk3
1371
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ kill 1371
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$

Question # 3

```
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ cat > file1
First File
^C
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ cat > file2
Second File.
^C
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ cat file1
First File
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ cat file1 file2  > file3
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ cat file3
First File
Second File.
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$
```

```
darklord@darklord:~/Documents/fahad$ cat > file1
file 1
darklord@darklord:~/Documents/fahad$ cat > file2
file 2
darklord@darklord:~/Documents/fahad$ cat file1 file2 > file3
darklord@darklord:~/Documents/fahad$ cat file3
file 1
file 2
darklord@darklord:~/Documents/fahad$ sudo chown root file3
[sudo] password for darklord:
darklord@darklord:~/Documents/fahad$ ls -l
total 12
-rw-rw-r-- 1 darklord darklord  7 21:46 12  نومبر file1
-rw-rw-r-- 1 darklord darklord  7 21:46 12  نومبر file2
-rw-rw-r-- 1 root     darklord 14 21:46 12  نومبر file3
darklord@darklord:~/Documents/fahad$
```

Question # 4


darkjoker@darkjoker-VirtualBox: ~/Documents/M_Fahad
darkjoker@darkjoker-VirtualBox:~$ cd Documents
darkjoker@darkjoker-VirtualBox:~/Documents$ mkdir M_Fahad
mkdir: cannot create directory ‘M_Fahad’: File exists
darkjoker@darkjoker-VirtualBox:~/Documents$ cd M_Fahad
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ stat f2
File: ‘f2’
Size: 0 Blocks: 0 IO Block: 4096 regular empty file
Device: 801h/2049d Inode: 5639056 Links: 1
Access: (0770/-rwxrwx---) Uid: (1000/darkjoker) Gid: (1000/darkjoker)
Access: 2021-11-12 20:19:39.879718000 +0500
Modify: 2021-11-12 19:45:25.383484739 +0500
Change: 2021-11-12 19:46:58.951484739 +0500
Birth: -
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ touch -a f2
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ stat f2
File: ‘f2’
Size: 0 Blocks: 0 IO Block: 4096 regular empty file
Device: 801h/2049d Inode: 5639056 Links: 1
Access: (0770/-rwxrwx---) Uid: (1000/darkjoker) Gid: (1000/darkjoker)
Access: 2021-11-12 21:48:08.959673400 +0500
Modify: 2021-11-12 19:45:25.383484739 +0500
Change: 2021-11-12 21:48:08.959673400 +0500
Birth: -

Question # 5

```
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ nano Q5.sh
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ bash Q5.sh
Enter Your Full Name
Muhammad Fahad
Enter Your Id
FA19-BSSE-0014
Enter your Semester
5th Semester
Enter your Program
BSSE
Enter Your Cousre
Operating System lab
Enter your Section
An
============= Bio Data =============
| Name      | Muhammad Fahad |
| ID        | FA19-BSSE-0014 |
| Semester  | 5th Semester |
| Program   | BSSE |
| Course    | Operating System lab |
| Section   | An |
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$
```

Code:

```
echo "Enter Your Full Name"
read fName
echo "Enter Your Id"
read id
echo "Enter your Semester"
read semester
echo "Enter your Program"
read program
echo "Enter Your Cousre"
read course
echo "Enter your Section"
read section

echo "============= Bio Data ============="
echo "| Name\t|\t$fName \t|"
echo "| ID\t|\t$id \t|"
echo "| Semester\t|\t$semester \t|"
echo "| Program\t|\t$program \t|"
echo "| Course\t|\t$course \t|"
echo "| Section\t|\t$section \t|"
```

Question # 6

```
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ nano Q6.sh
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ bash Q6.sh
Enter Student Marks
69
He/She is eligible
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$
```

CODE :

```
#! /bin/sh

echo "Enter Student Marks"
read markss

if [ $marks -ge 50 ]
then
echo "He/She is eligible"
else
echo "Not Eligible!"
fi
```

Question # 7

```
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ nano Q7.sh
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$ bash Q7.sh
Enter First Number:
56
Enter Second Number:
45
Addition : 101
Subtraction : 11
Multiplication : 2520
Division : 1
darkjoker@darkjoker-VirtualBox:~/Documents/M_Fahad$
```

```
#! /bin/sh

echo "Enter First Number: \b"
read n1
echo "Enter Second Number: \b"
read n2

echo "Addition : `expr $n1 + $n2`"
echo "Subtraction : `expr $n1 - $n2`"
echo "Multiplication : `expr $n1 \* $n2`"
echo "Division : `expr $n1 / $n2`"
```