

Exp No: 3

VIRTUALIZATION

INSTALLATION OF VIRTUAL MACHINE IN VIRTUAL BOX

AIM:

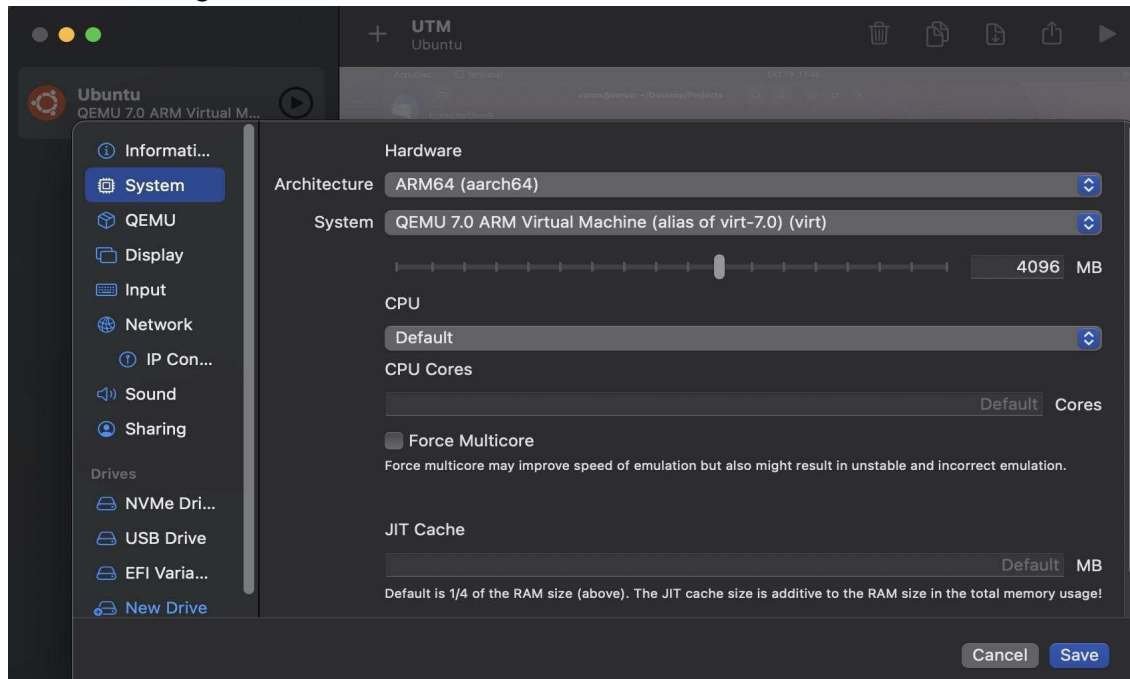
To configure a Virtual Machine using Virtual Box and Launch to execute a simple program using PYTHON.

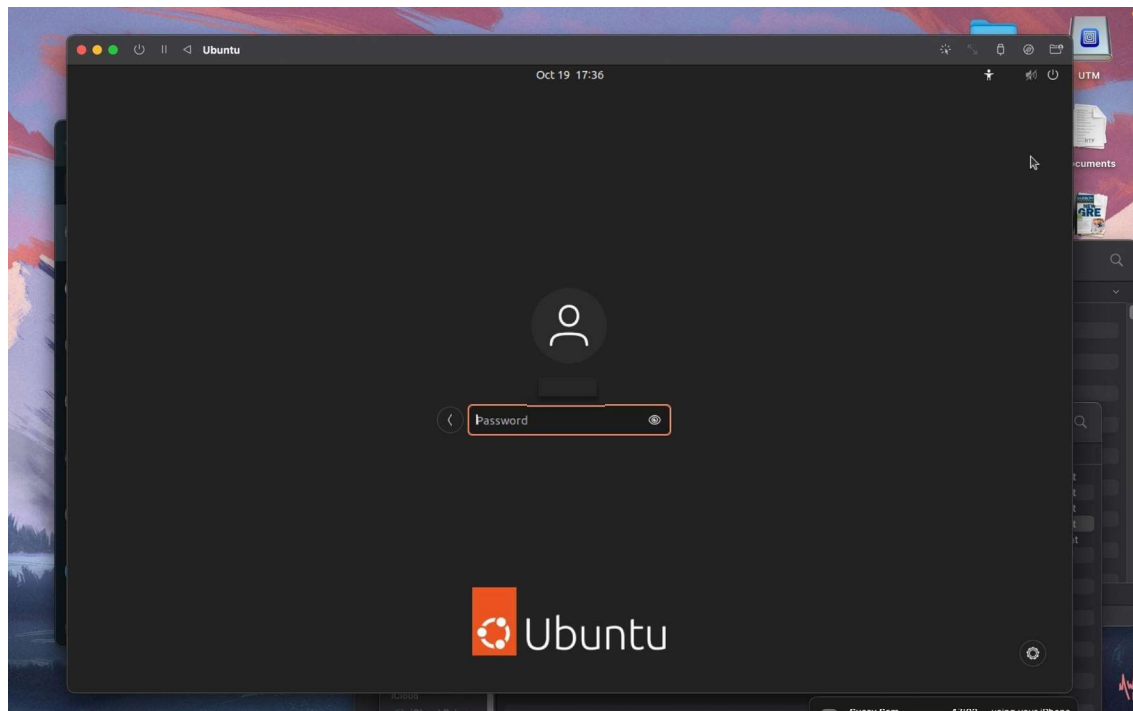
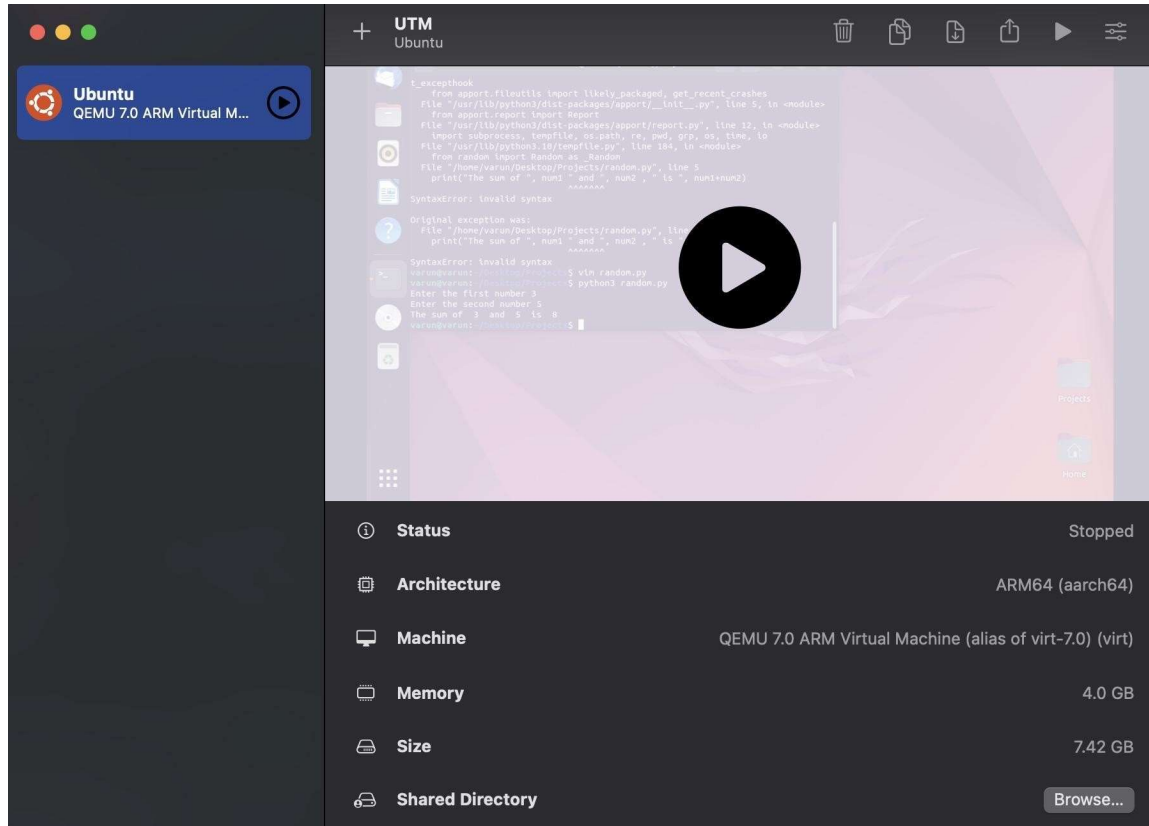
PROCEDURE:

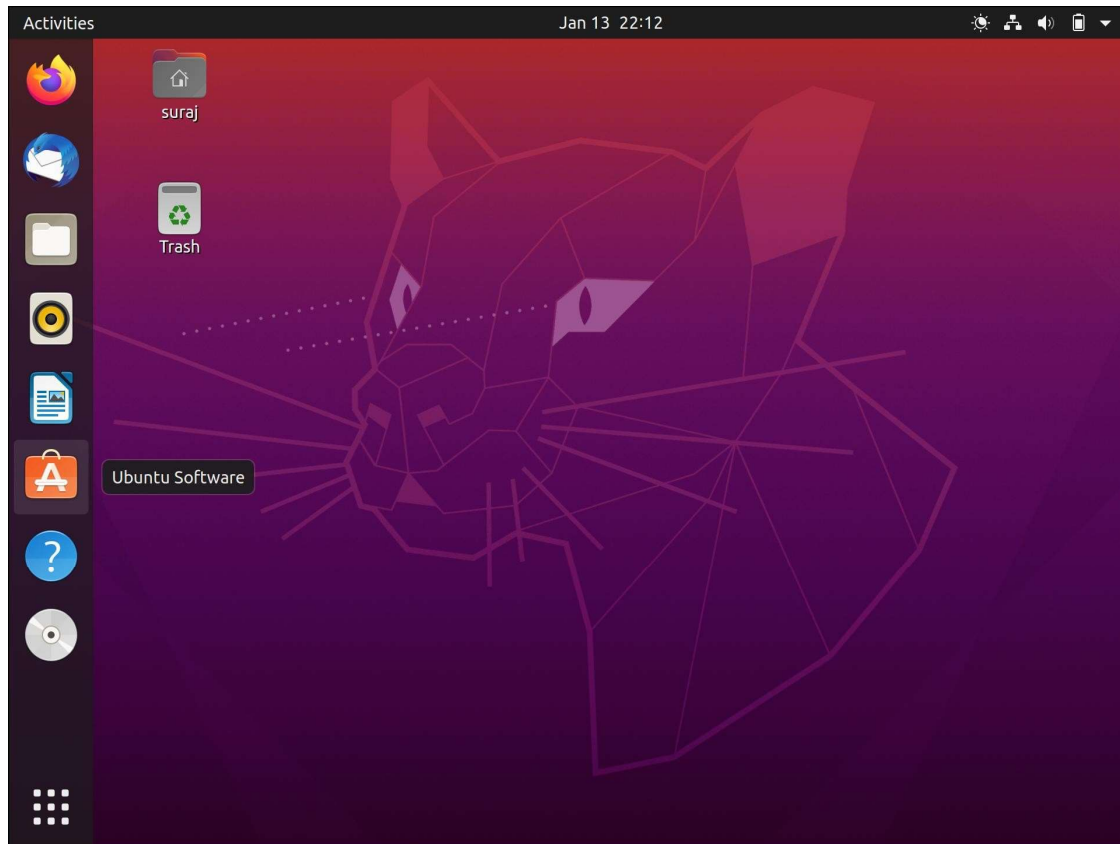
1. Launch aVirtual Box
2. Create new virtual machine
3. Customize the set-up
4. Set username and password
5. Browse for .iso file of an operating system
6. Configure the hardware capacity
7. Finish and power on the VM
8. Install C or PYTHON OR JAVA Compiler and execute a simple program

OUTPUT:

The virtual machine of Ubuntu OS was created using a virtual box. Ubuntu virtual machine running in Virtual Box.





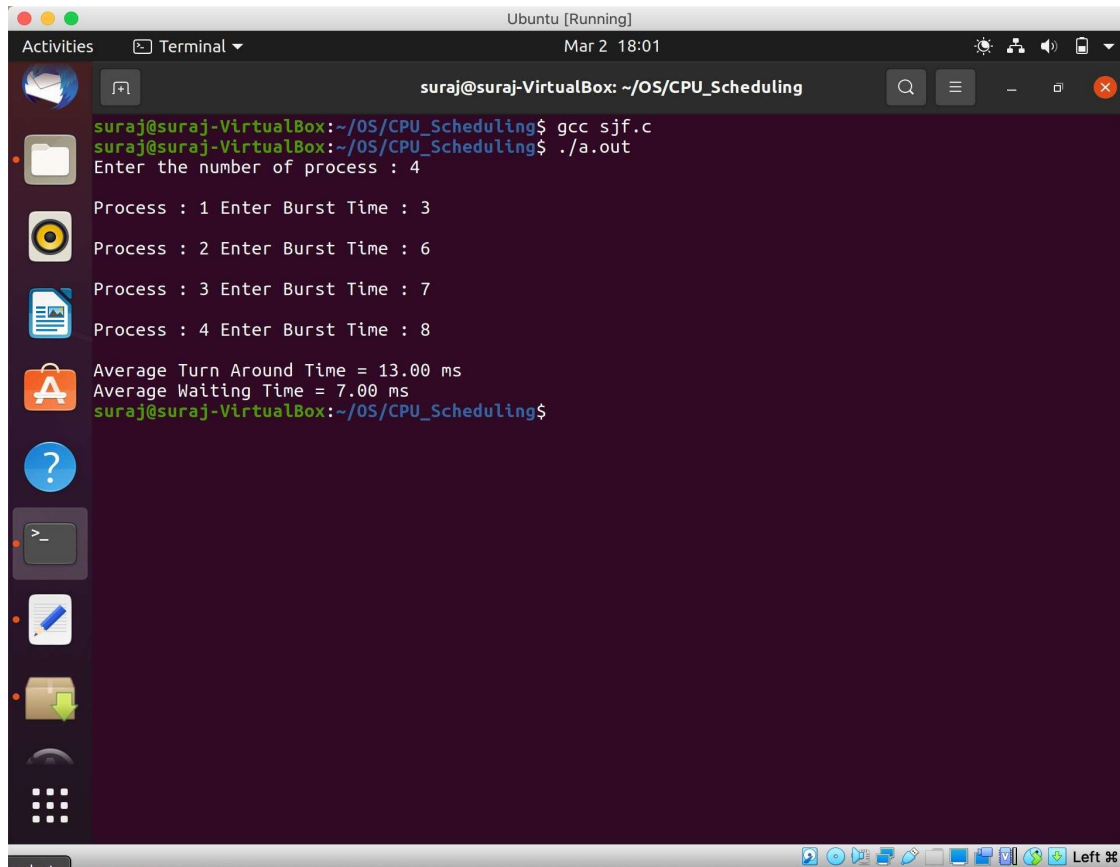


A screenshot of a terminal window titled 'Ubuntu [Running]' with the date and time 'Mar 2 18:14'. The terminal shows the execution of a C program named 'priority.c' in the directory '~/OS/CPU_Scheduling'. The program prompts the user to enter the number of processes (4) and then the process name, arrival time, execution time, and priority for each process. The output shows a table of process details and the calculated average waiting time and average turnaround time.

```
suraj@suraj-VirtualBox: ~/OS/CPU_Scheduling
suraj@suraj-VirtualBox:~/OS/CPU_Scheduling$ gcc priority.c
suraj@suraj-VirtualBox:~/OS/CPU_Scheduling$ ./a.out
Enter the number of process : 4
Enter process name, arrivaltime, execution time and priority : p0 0 9 2
Enter process name, arrivaltime, execution time and priority : p1 1 4 1
Enter process name, arrivaltime, execution time and priority : p2 3 6 4
Enter process name, arrivaltime, execution time and priority : p3 2 3 3

Pname  arrivaltime  executiontime  priority  waitingtime  tatime
p1      1           4           1           0            4
p0      0           9           2           5           14
p3      2           3           3          12           15
p2      3           6           4          14           20

Average waiting time is : 7.750000
Average turnaroundtime is : 13.250000
suraj@suraj-VirtualBox:~/OS/CPU_Scheduling$
```



```
Ubuntu [Running]
Activities Terminal Mar 2 18:01
suraj@suraj-VirtualBox: ~/OS/CPU_Scheduling
suraj@suraj-VirtualBox:~/OS/CPU_Scheduling$ gcc sjf.c
suraj@suraj-VirtualBox:~/OS/CPU_Scheduling$ ./a.out
Enter the number of process : 4
Process : 1 Enter Burst Time : 3
Process : 2 Enter Burst Time : 6
Process : 3 Enter Burst Time : 7
Process : 4 Enter Burst Time : 8
Average Turn Around Time = 13.00 ms
Average Waiting Time = 7.00 ms
suraj@suraj-VirtualBox:~/OS/CPU_Scheduling$
```

RESULT:

The installation, configuration and running a python program in Ubuntu in Virtual Box has been executed successfully.