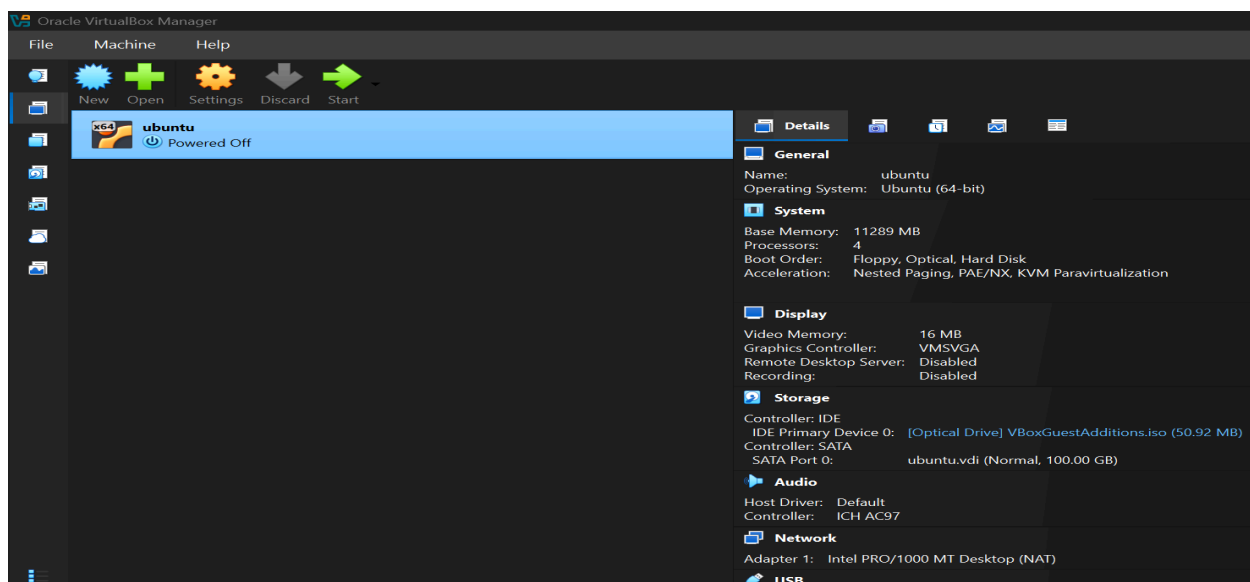
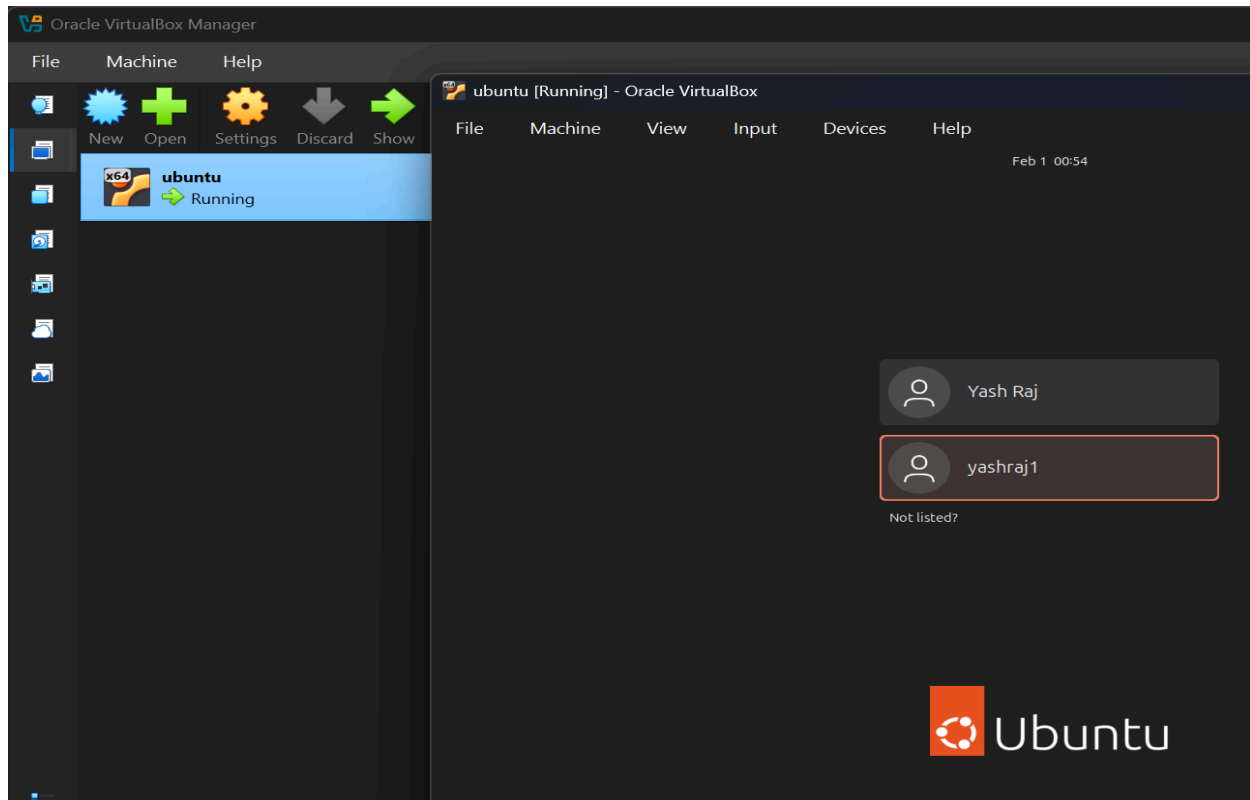


OS Lab01 Tasks

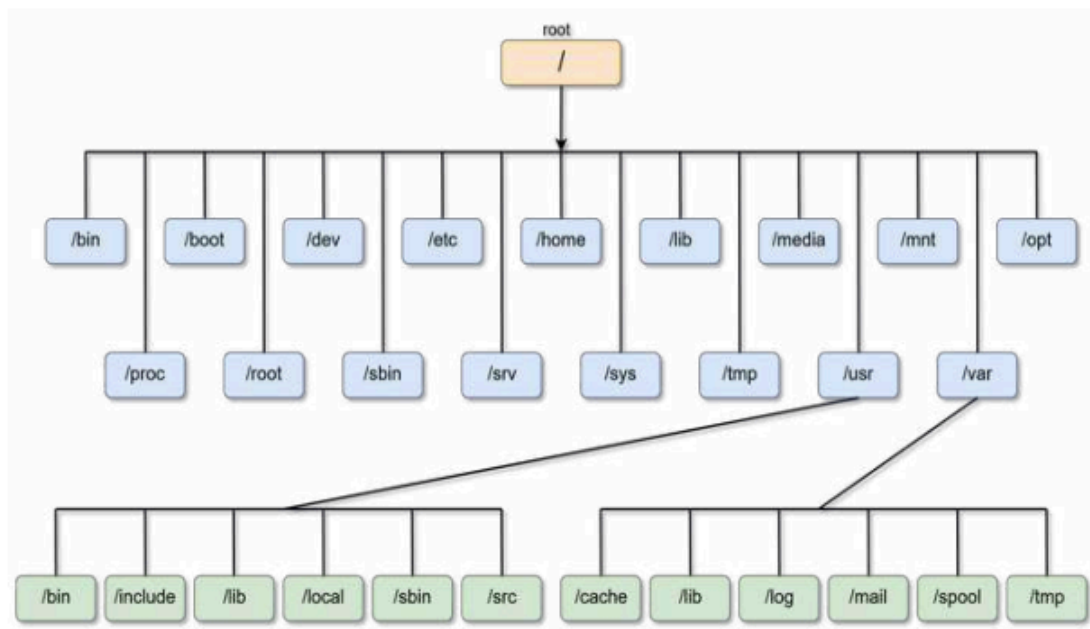
Name : Yash Raj

Roll Number: 24k-0737

Task#1:



Task#2:



***/:* Parent Directory of Linux**

***/bin:* Binary Directory holds the command and it is divided into two types:**

- ***User Binary***
- ***System Binary***

***/sbin:* sbin stand for system binary which stores executable programs.**

***/etc:* etc in Linux works likes the C drive present in the windows.**

***/home:* home Directory is the parent directory of the user created by the super user.**

***/root:* Root Directory is the parent directory of the home Directory.**

***/usr:* Holds files which are not essential for the initial boot.**

***/dev:* contains files that represents the every piece of hardware.**

***/var:* var directory contains log files having information of logged in user.**

***/lib:* lib Directory holds the essential libraries.**

***/tmp:* tmp Directory holds the temporary program files which can be used by the user.**

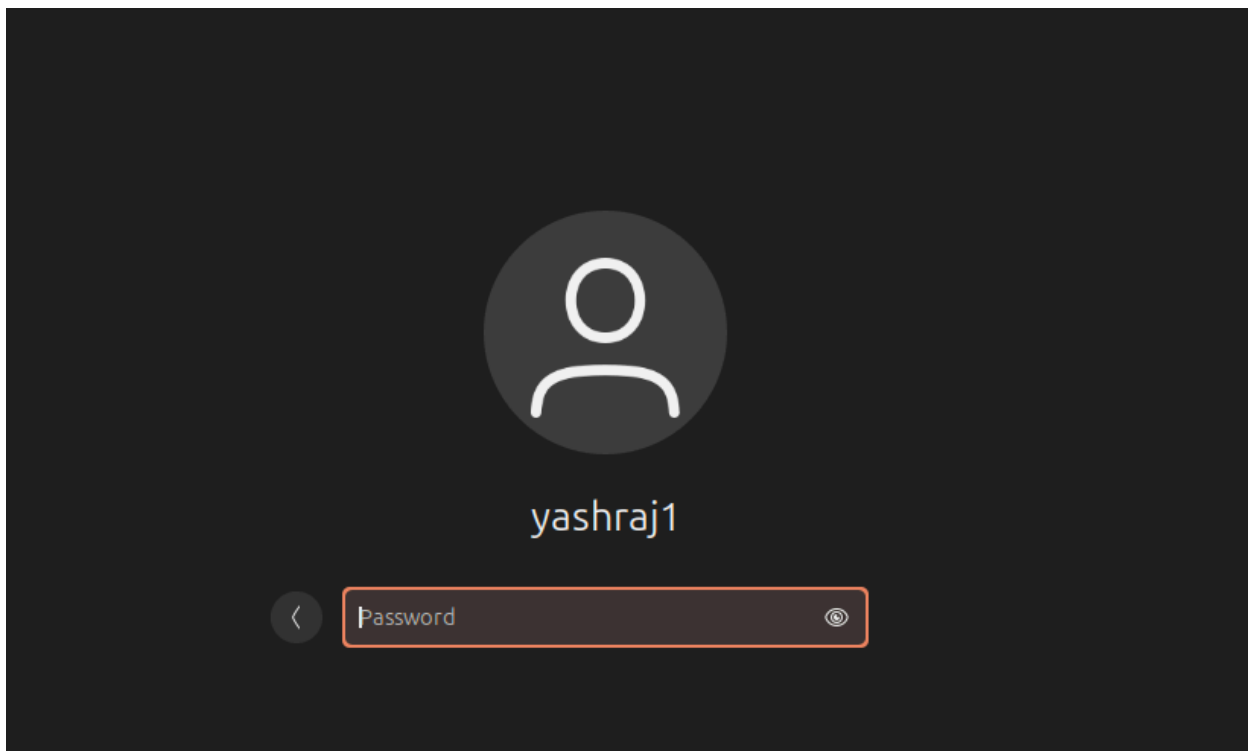
***/proc:* A Virtual fileSystem , a fake file system that is stored in the RAM.**

Task#3:

1. New User :

```
yash-raj@yash-raj-VirtualBox:~$ sudo adduser yashraj1
info: Adding user `yashraj1' ...
info: Selecting UID/GID from range 1000 to 59999 ...
info: Adding new group `yashraj1' (1001) ...
info: Adding new user `yashraj1' (1001) with group `yashraj1 (1001)' ...
info: Creating home directory `/home/yashraj1' ...
info: Copying files from `/etc/skel' ...
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
Changing the user information for yashraj1
Enter the new value, or press ENTER for the default
    Full Name []:
    Room Number []:
    Work Phone []:
    Home Phone []:
    Other []:
Is the information correct? [Y/n] y
info: Adding new user `yashraj1' to supplemental / extra groups `users' ...
info: Adding user `yashraj1' to group `users' ...
```

2. Login :



3. New Folder in Home Directory named by roll number :

```
yash-raj@yash-raj-VirtualBox: ~  
yash-raj@yash-raj-VirtualBox:~$ mkdir OS_Lab_24k-0737  
yash-raj@yash-raj-VirtualBox:~$ ls  
Desktop    Downloads  OS_Lab_24k-0737  Public  Templates  
Documents  Music      Pictures          snap    Videos
```

4. Text File including my roll number :

```
yash-raj@yash-raj-VirtualBox: ~/OS_Lab_24k-0737  
yash-raj@yash-raj-VirtualBox:~$ cd OS_Lab_24k-0737  
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ touch 24k-0737.txt  
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ ls  
24k-0737.txt
```

6. Text File Operations :

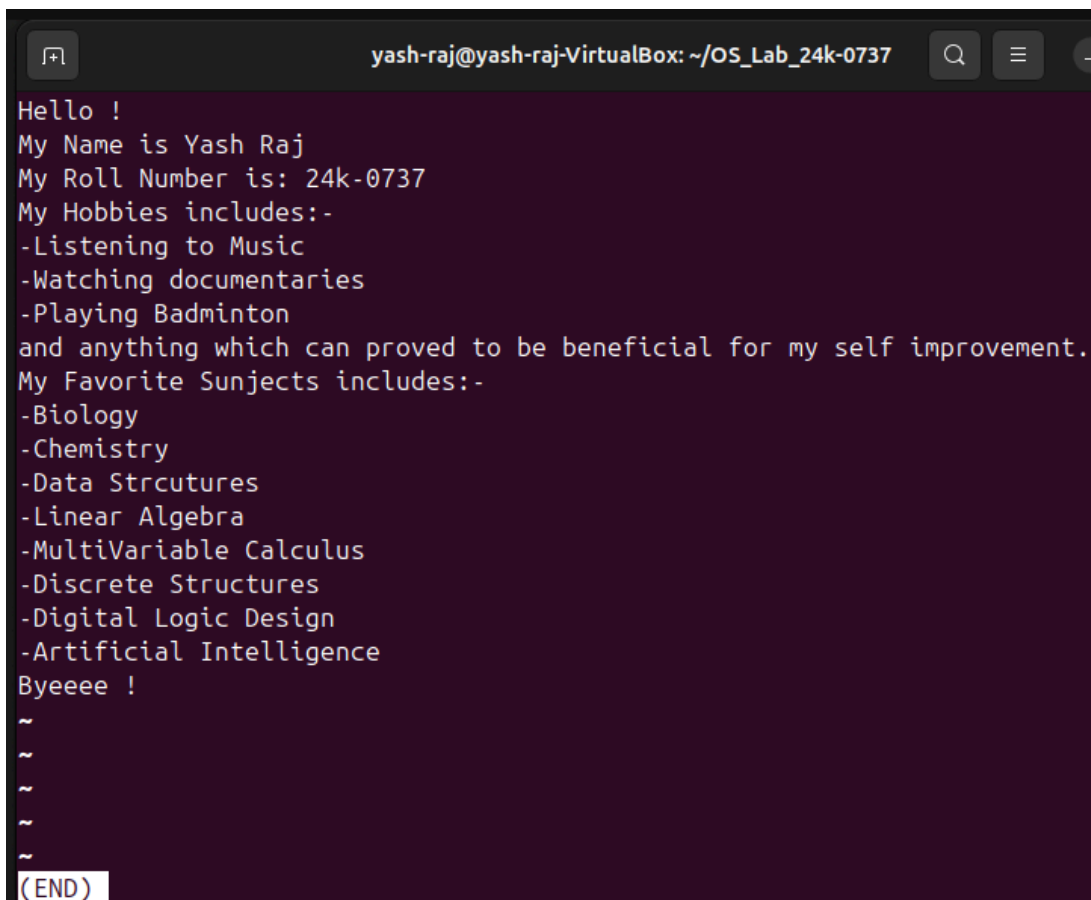
Normal Content :

```
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ nano 24k-0737.txt  
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ cat 24k-0737.txt  
Hello !  
My Name is Yash Raj  
My Roll Number is: 24k-0737  
My Hobbies includes:-  
-Listening to Music  
-Watching documentaries  
-Playing Badminton  
and anything which can proved to be beneficial for my self improvement.  
My Favorite Sunjects includes:-  
-Biology  
-Chemistry  
-Data Strcutures  
-Linear Algebra  
-MultiVariable Calculus  
-Discrete Structures  
-Digital Logic Design  
-Artificial Intelligence  
Byeeeee !
```

Reversed Content :

```
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ tac 24k-0737.txt
Byeeee !
-Artificial Intelligence
-Digital Logic Design
-Discrete Structures
-MultiVariable Calculus
-Linear Algebra
-Data Strcutures
-Chemistry
-Biology
My Favorite Sunjects includes:-
and anything which can proved to be beneficial for my self improvement.
-Playing Badminton
-Watching documentaries
-Listening to Music
My Hobbies includes:-
My Roll Number is: 24k-0737
My Name is Yash Raj
Hello !
```

Content In Scrolling View :



```
yash-raj@yash-raj-VirtualBox: ~/OS_Lab_24k-0737
Hello !
My Name is Yash Raj
My Roll Number is: 24k-0737
My Hobbies includes:-
-Listening to Music
-Watching documentaries
-Playing Badminton
and anything which can proved to be beneficial for my self improvement.
My Favorite Sunjects includes:-
-Biology
-Chemistry
-Data Strcutures
-Linear Algebra
-MultiVariable Calculus
-Discrete Structures
-Digital Logic Design
-Artificial Intelligence
Byeeee !
~
~
~
~
~
(END)
```

Beginning Content :

```
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ less 24k-0737.txt
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ head 24k-0737.txt
Hello !
My Name is Yash Raj
My Roll Number is: 24k-0737
My Hobbies includes:-
-Listening to Music
-Watching documentaries
-Playing Badminton
and anything which can proved to be beneficial for my self improvement.
My Favorite Sunjects includes:-
-Biology
```

Ending Content :

```
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ tail 24k-0737.txt
My Favorite Sunjects includes:-
-Biology
-Chemistry
-Data Strcutures
-Linear Algebra
-MultiVariable Calculus
-Discrete Structures
-Digital Logic Design
-Artificial Intelligence
Byeeee !
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$
```

Overwriting :

```
cat: cannot access '24k-0737.txt': No such file or directory
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ echo "This is after overwriting
text" >> 24k-0737.txt
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ cat 24k-0737.txt
This is after overwriting text
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$
```

Creation, Compilation and Execution of C program File :

```
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ nano 24k-0737.c
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ cat 24k-0737.c
#include<stdio.h>
int main(){
printf("My Name is Yash Raj\n Roll-No: 24k-0737\n");
return 0;
}
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ gcc 24k-0737.c -o program
yash-raj@yash-raj-VirtualBox:~/OS_Lab_24k-0737$ ./program
My Name is Yash Raj
Roll-No: 24k-0737
```