



Shri Vile Parle Kelavani Mandal's

INSTITUTE OF TECHNOLOGY

DHULE (M.S.)

DEPARTMENT OF COMPUTER ENGINEERING

Subject : Cloud Computing Lab

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Class : B.tech Final Year

Batch : B2

Division: -

Expt. No. :04

Date : 10/09/2025

Title : Installation and configuration of virtual machine.

Remark

Signature

Hardware/Software Required: 2GB RAM,320 GB hard, dual core processor Virtual Box, Windows8 OS.

Theory:

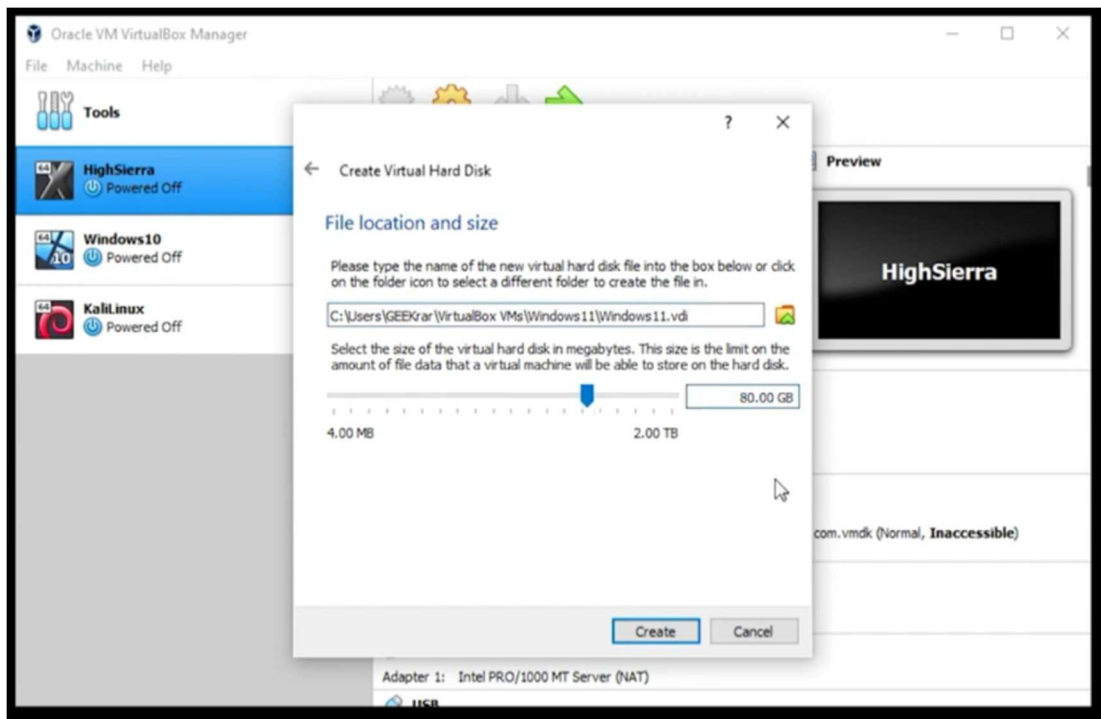
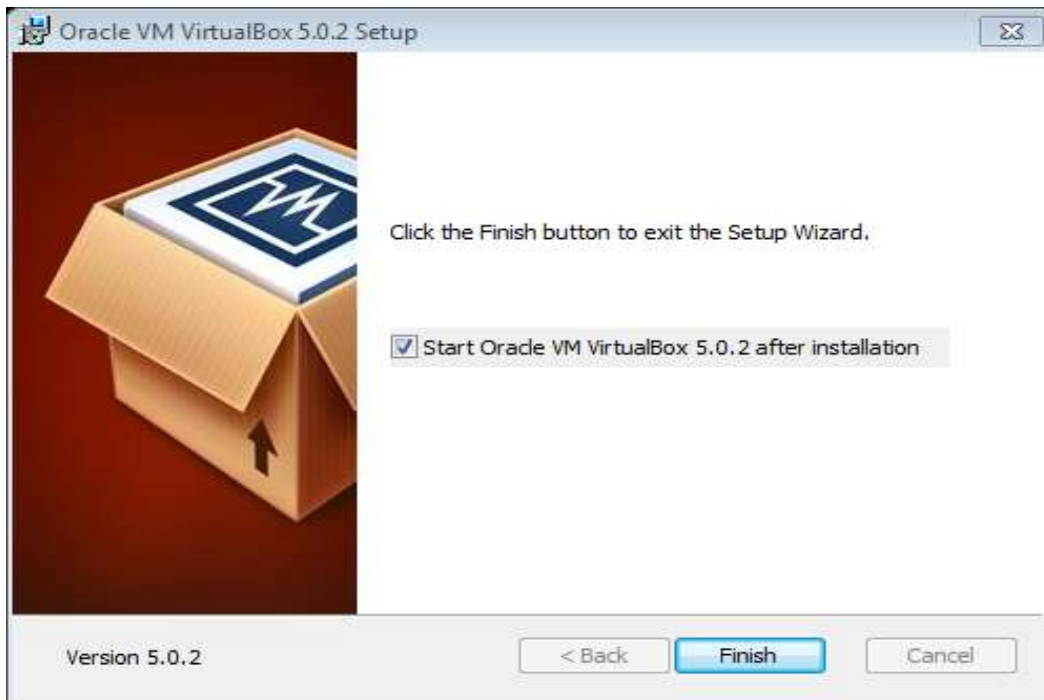
Virtualization is the creation of a virtual version of something, such as an operating system, a server, a storage device or network resources.

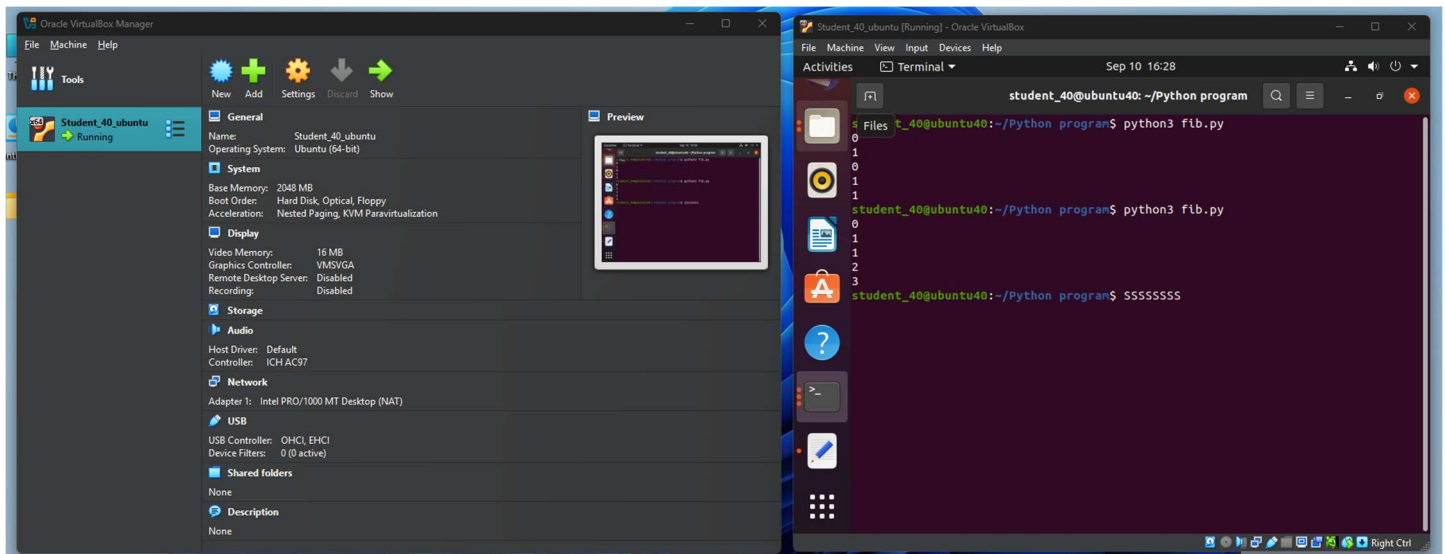
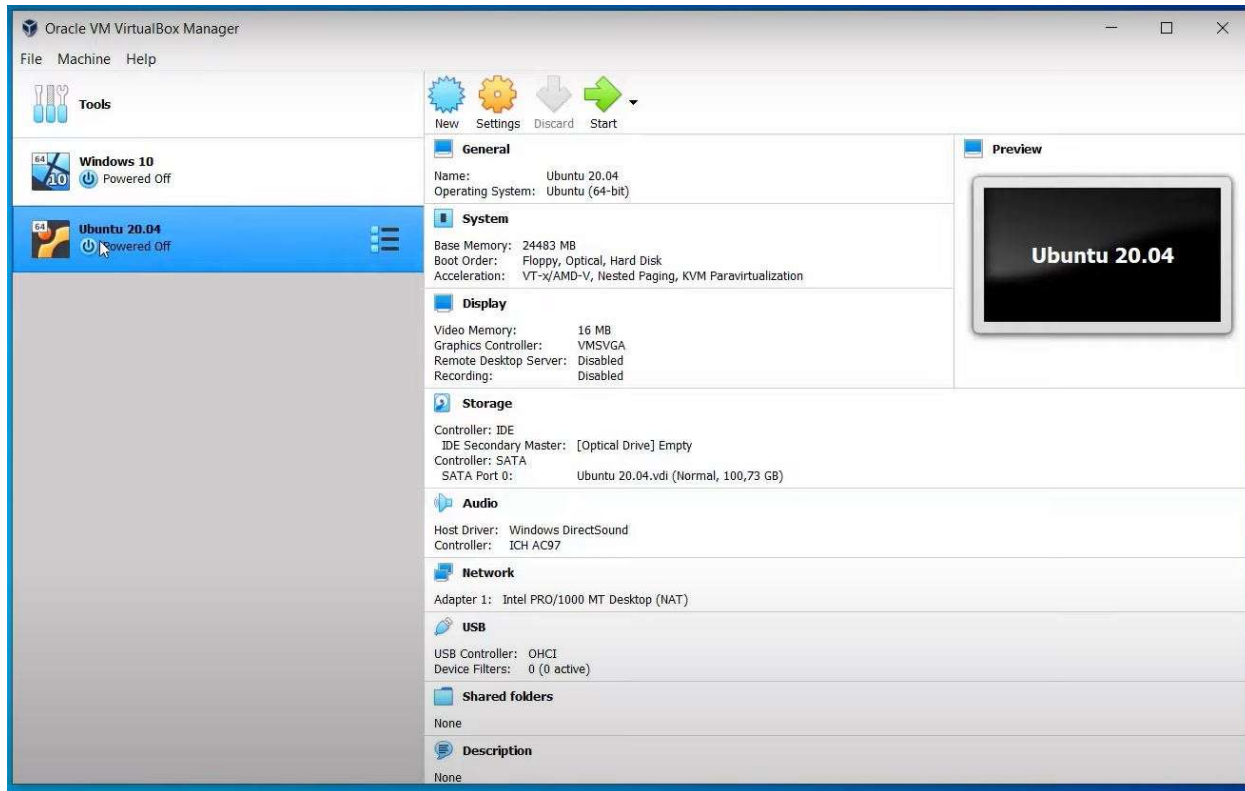
Advantages of virtual installation:

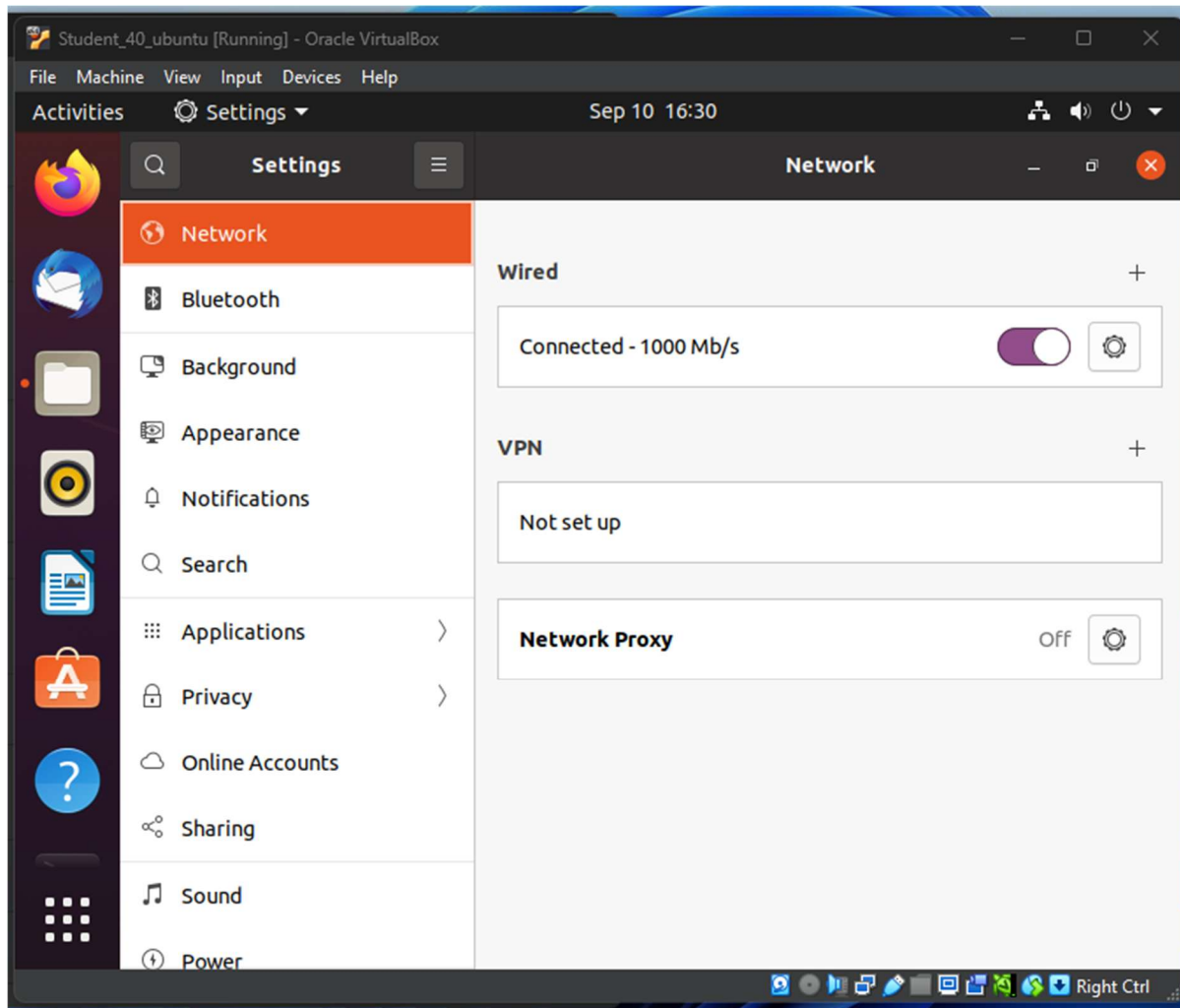
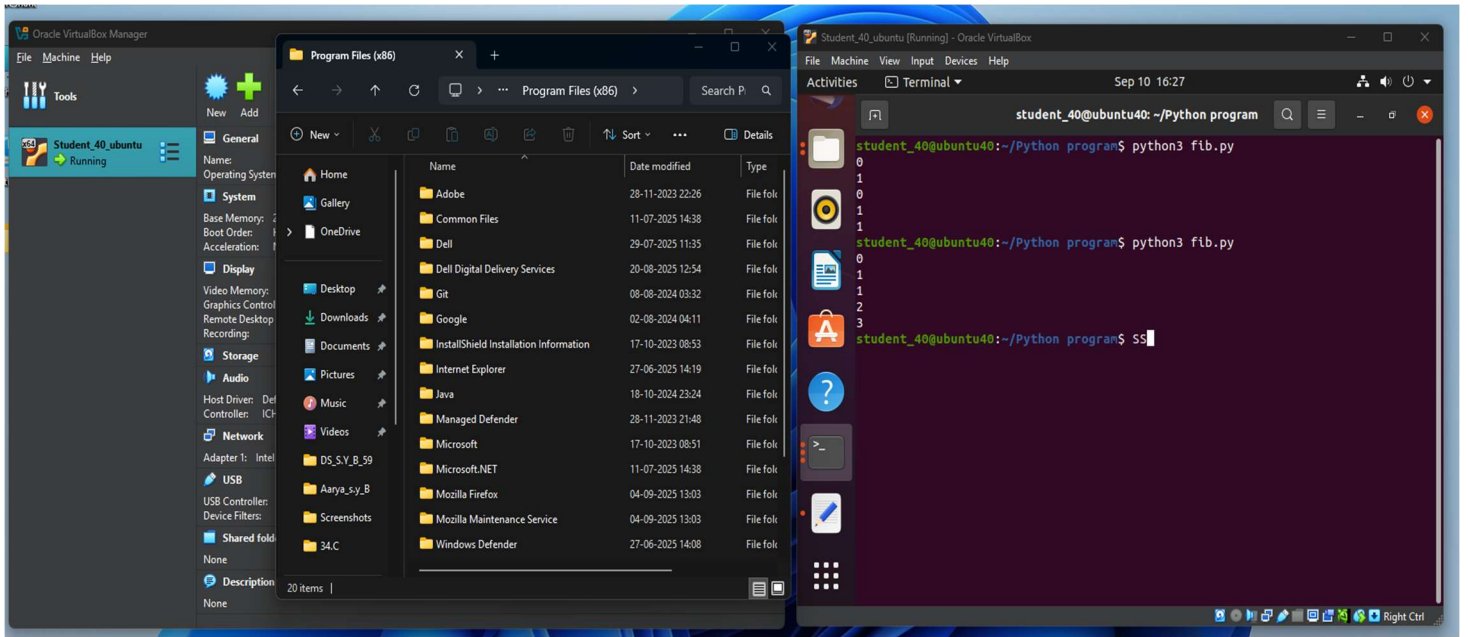
The size of the installation doesn't have to be predetermined. It can be a dynamically resized virtual hard drive. We do not need to reboot in order to switch between different OS. The virtual machine will use our main OS internet connection. The virtual machine will set up its own video configuration, so we don't have to worry about installing proprietary graphics drivers to get a reasonable screen resolution. It's low commitment. If we later decide you don't like Ubuntu, all we have to do is Delete the virtual hard drive and uninstall VirtualBox.

Procedure/ Program:

1. The Installation process of Virtual box
2. Installation of virtual OS in virtual box
3. Run The Python3 Program on Ubuntu
 - a) Palindrome Check
 - b) Factorial Generate
 - c) Fibonacci Series Generation







Student_40_ubuntu [Running] - Oracle VirtualBox

File Machine View Input Devices Help

Activities Text Editor Sep 10 16:43

fact.py
~/Python program

Open Save

*plindrome.py *fib.py fact.py

```
1 num = 5
2 for i in range(1, num+1):
3     fact = fact*1
4 print(f"Factorial of {num} is {fact}")
```

Python Tab Width: 8 Ln 4, Col 39 INS

Right Ctrl

Student_40_ubuntu [Running] - Oracle VirtualBox

File Machine View Input Devices Help

Activities Text Editor Sep 10 16:29

*plindrome.py
~/Python program

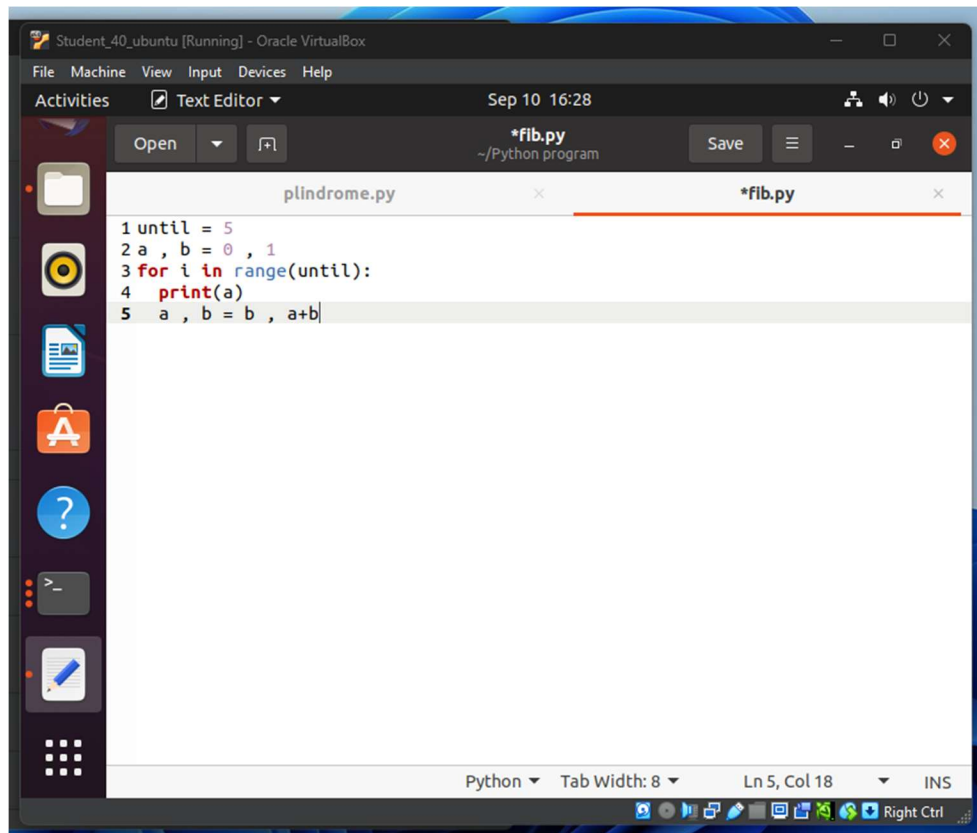
Open Save

*plindrome.py *fib.py

```
1 string = 'abba'
2 string2 = string[::-1]
3 if string == string2:
4     print("String is Plindrome")
5 else:
6     print("String is not Plindrome")
```

Python Tab Width: 8 Ln 6, Col 36 INS

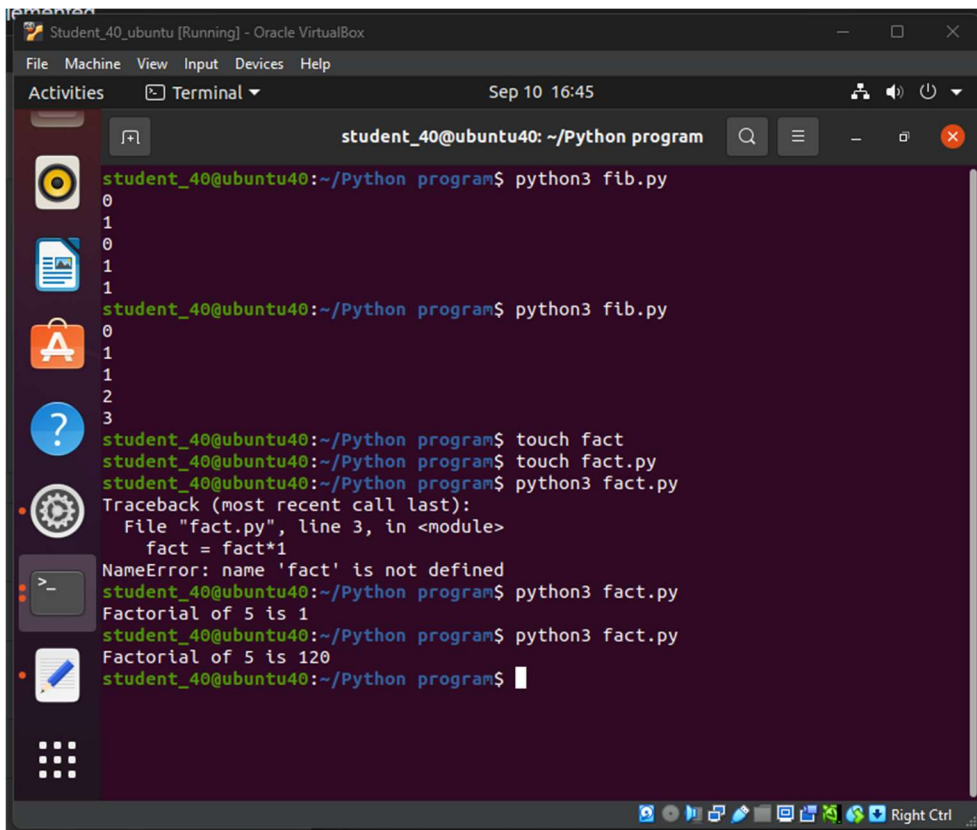
Right Ctrl



The screenshot shows a text editor window titled "Student_40_ubuntu [Running] - Oracle VirtualBox". The editor has a menu bar with "File", "Machine", "View", "Input", "Devices", and "Help". The status bar at the top indicates "Sep 10 16:28". The editor is displaying a file named "fib.py" with the following code:

```
1 until = 5
2 a , b = 0 , 1
3 for i in range(until):
4     print(a)
5     a , b = b , a+b
```

The editor also shows a file explorer on the left with icons for "Activities", "Text Editor", "Open", "Save", and "Run". The status bar at the bottom indicates "Python", "Tab Width: 8", "Ln 5, Col 18", and "INS".



The screenshot shows a terminal window titled "Student_40_ubuntu [Running] - Oracle VirtualBox". The terminal has a menu bar with "File", "Machine", "View", "Input", "Devices", and "Help". The status bar at the top indicates "Sep 10 16:45". The terminal is displaying the output of a Python program:

```
student_40@ubuntu40: ~/Python program
student_40@ubuntu40:~/Python program$ python3 fib.py
0
1
0
1
1
1
student_40@ubuntu40:~/Python program$ python3 fib.py
0
1
1
2
3
student_40@ubuntu40:~/Python program$ touch fact
student_40@ubuntu40:~/Python program$ touch fact.py
student_40@ubuntu40:~/Python program$ python3 fact.py
Traceback (most recent call last):
  File "fact.py", line 3, in <module>
    fact = fact*1
NameError: name 'fact' is not defined
student_40@ubuntu40:~/Python program$ python3 fact.py
Factorial of 5 is 1
student_40@ubuntu40:~/Python program$ python3 fact.py
Factorial of 5 is 120
student_40@ubuntu40:~/Python program$
```

The terminal also shows a file explorer on the left with icons for "Activities", "Terminal", "Open", "Save", and "Run". The status bar at the bottom indicates "Right Ctrl".