

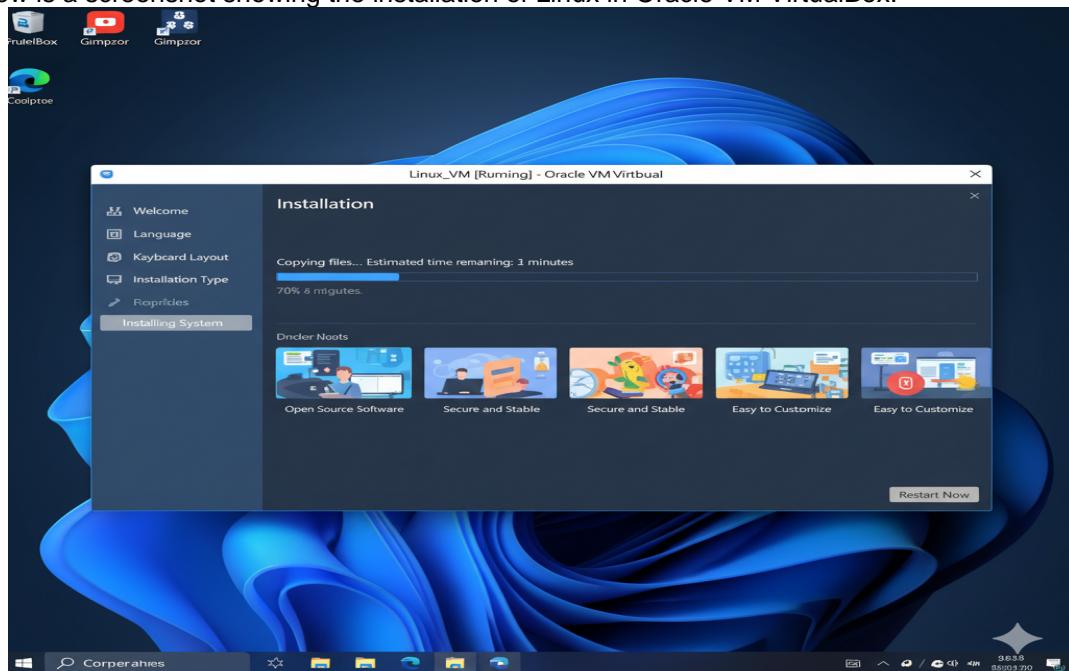
# Linux & Shell Scripting Report

## Introduction

The purpose of this assignment is to understand the fundamentals of Linux and shell scripting. Linux is an open-source operating system widely used for development, networking, and system administration. Shell scripting allows automation of repetitive tasks, enhances productivity, and provides greater control over system operations.

## Linux Installation Documentation

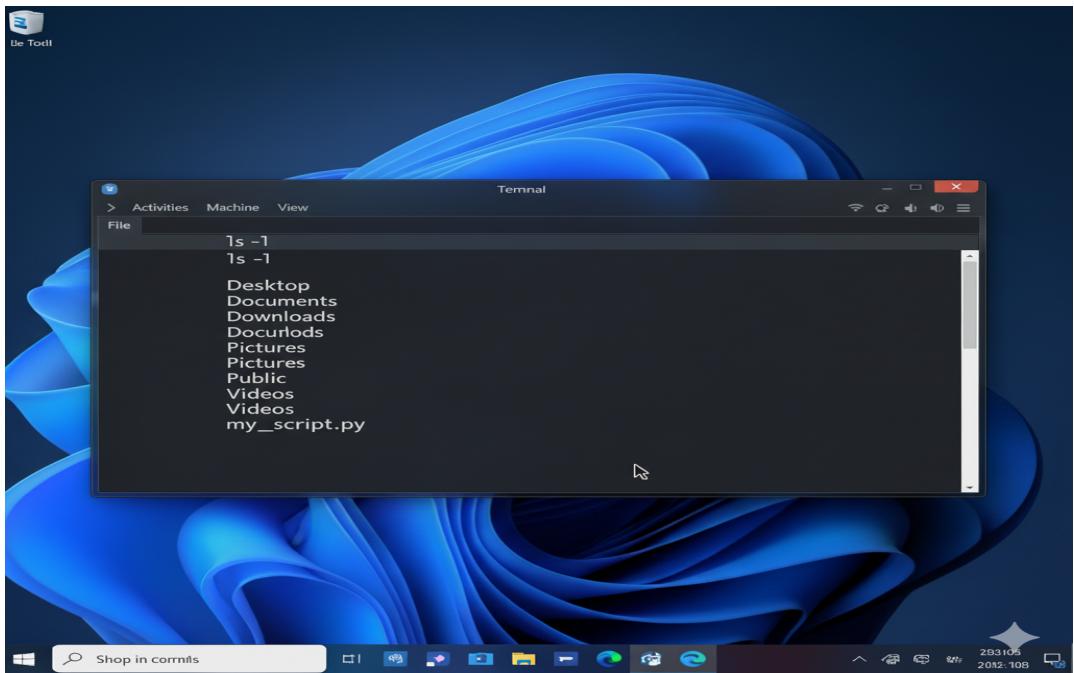
Below is a screenshot showing the installation of Linux in Oracle VM VirtualBox.



## Shell Commands Table

Command	Syntax	Description
ls -l	ls -l	Lists files and directories in long format
cd	cd [directory]	Changes the current directory
pwd	pwd	Displays the current working directory

Below are sample terminal outputs for shell commands:

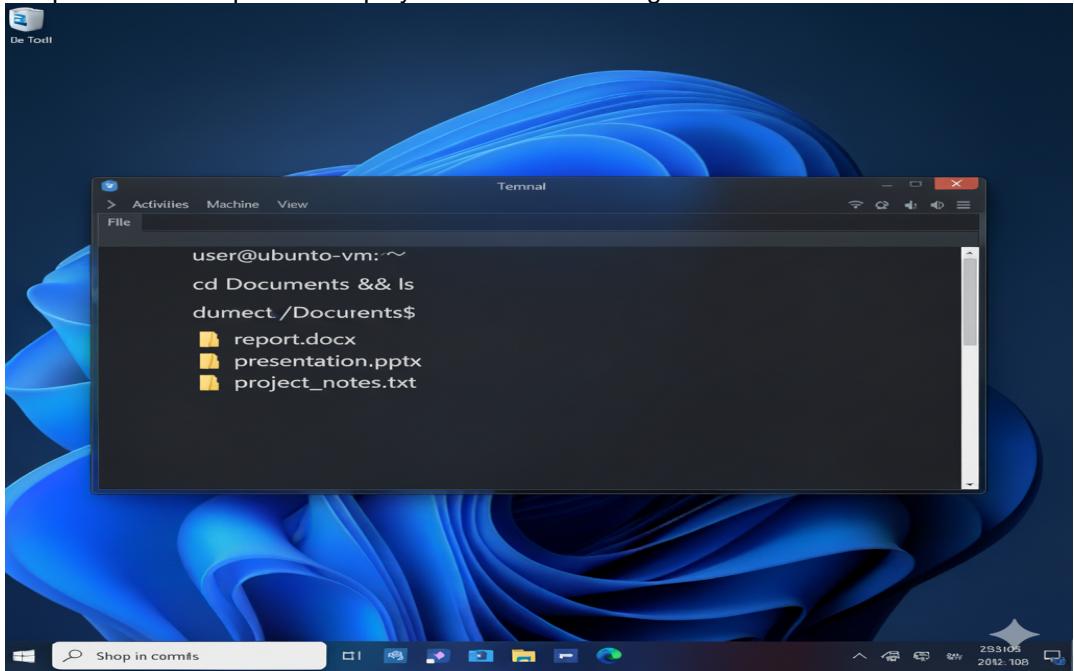


## Shell Scripts

### Example Script:

```
#!/bin/bash
echo "Enter your name:"
read name
echo "Welcome, $name!"
```

This script takes user input and displays a welcome message.



[GitHub Repository Link](#)

URL: <https://github.com/vishalkumarjha192/Computer-Science-Fundamentals-Career-Pathways.git>

**Reflection**

**Challenges Faced:** Understanding shell syntax and permissions setup during installation.

**Learning Outcomes:** Improved understanding of Linux commands, directory management, and automation through shell scripting.

**Real-World Application:** These skills can be applied in software deployment, DevOps automation, and server maintenance.