

vishal-pandey@2023BCSE021:~

```
vishal-pandey@2023BCSE021:~$ uname -a
Linux 2023BCSE021 6.14.0-28-generic #28~24.04.1-Ubuntu SMP PREEMPT_DYNAMIC Fri Jul 25 10:47:01 UTC 2 x86_64 x86_64 x86_6
4 GNU/Linux
vishal-pandey@2023BCSE021:~$ python3 --version
Python 3.12.3
vishal-pandey@2023BCSE021:~$ which python3
/usr/bin/python3
vishal-pandey@2023BCSE021:~$ python vp.py
Command 'python' not found, did you mean:
  command 'python3' from deb python3
  command 'python' from deb python-is-python3
vishal-pandey@2023BCSE021:~$ python3 vp.py
Hello
vishal-pandey@2023BCSE021:~$
```

Windows PowerShell - X

```
PS C:\Users\visha> systeminfo | findstr /B /C:"OS Name" /C:"OS Version"
OS Name: Microsoft Windows 11 Home Single Language
OS Version: 10.0.26100 N/A Build 26100
PS C:\Users\visha> python --version
Python 3.13.7
PS C:\Users\visha> where python
PS C:\Users\visha> cd C:\Users\visha\
PS C:\Users\visha> notepad hello.py
PS C:\Users\visha> python hello.py
Hello from Python on Windows
PS C:\Users\visha> |
```

vishal-pandey@2023BCSE021:~

```
vishal-pandey@vishal-pandey-VirtualBox:~$ sudo hostnamectl set-hostname 2023BCSE021
[sudo] password for vishal-pandey:
vishal-pandey@vishal-pandey-VirtualBox:~$ exec bash
vishal-pandey@2023BCSE021:~$ hostname
2023BCSE021
vishal-pandey@2023BCSE021:~$
```



vishal-pandey@vishal-pandey-VirtualBox:~

```
vishal-pandey@vishal-pandey-VirtualBox:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
tmpfs           429M   1.6M  427M   1% /run
/dev/sda2        25G   9.6G   14G  42% /
tmpfs           2.1G     0  2.1G   0% /dev/shm
tmpfs           5.0M  8.0K  5.0M   1% /run/lock
tmpfs           429M  132K  429M   1% /run/user/1000
vishal-pandey@vishal-pandey-VirtualBox:~$ whereis ls
ls: /usr/bin/ls /usr/share/man/man1/ls.1.gz
vishal-pandey@vishal-pandey-VirtualBox:~$
```



vishal-pandey@vishal-pandey-VirtualBox:~

```
vishal-pandey@vishal-pandey-VirtualBox:~$ cal
Command 'cal' not found, but can be installed with:
sudo apt install ncal
vishal-pandey@vishal-pandey-VirtualBox:~$ sudo apt install ncal
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  ncal
0 upgraded, 1 newly installed, 0 to remove and 35 not upgraded.
Need to get 21.0 kB of archives.
After this operation, 59.4 kB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu noble/universe amd64 ncal amd64 12.1.8 [21.0 kB]
Fetched 21.0 kB in 1s (16.9 kB/s)
Selecting previously unselected package ncal.
(Reading database ... 150088 files and directories currently installed.)
Preparing to unpack .../archives/ncal_12.1.8_amd64.deb ...
Unpacking ncal (12.1.8) ...
Setting up ncal (12.1.8) ...
Processing triggers for man-db (2.12.0-4build2) ...
vishal-pandey@vishal-pandey-VirtualBox:~$ cal
      August 2025
Su Mo Tu We Th Fr Sa
                1  2
 3  4  5  6  7  8  9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31
```



vishal-pandey@vishal-pandey-VirtualBox:~\$

```
vishal-pandey@vishal-pandey-VirtualBox:~$ whoami
```

vishal-pandey

```
vishal-pandey@vishal-pandey-VirtualBox:~$ ps
```

PID	TTY	TIME	CMD
-----	-----	------	-----

4421	pts/0	00:00:00	bash
------	-------	----------	------

5842	pts/0	00:00:00	ps
------	-------	----------	----

```
vishal-pandey@vishal-pandey-VirtualBox:~$ man ls
```

```
vishal-pandey@vishal-pandey-VirtualBox:~$ echo "Hello Vishal JI"
```

Hello Vishal JI

```
vishal-pandey@vishal-pandey-VirtualBox:~$ grep "Vishal" vishal.txt
```

```
vishal-pandey@vishal-pandey-VirtualBox:~$ grep "is" vishal.txt
```

this is the test file. Created using touch vishal.txt

```
vishal-pandey@vishal-pandey-VirtualBox:~$ sort vishal.txt
```

this is the test file. Created using touch vishal.txt

```
vishal-pandey@vishal-pandey-VirtualBox:~$ wc vishal.txt
```

1	9	54	vishal.txt
---	---	----	------------

```
vishal-pandey@vishal-pandey-VirtualBox:~$ wget http://example.com
```

--2025-08-28 00:33:25-- http://example.com/

Resolving example.com (example.com)... 23.220.75.232, 23.215.0.138, 23.215.0.136, ...

Connecting to example.com (example.com)|23.220.75.232|:80... connected.

HTTP request sent, awaiting response... 200 OK

Length: 1256 (1.2K) [text/html]

Saving to: 'index.html'

```
index.html          100%[=====] 1.23K -.- KB/s in 0s
```

2025-08-28 00:33:26 (126 MB/s) - 'index.html' saved [1256/1256]

```
vishal-pandey@vishal-pandey-VirtualBox:~$
```



vishal-pandey@vishal-pandey-VirtualBox: ~

```
/usr/share/lintian/overrides/bash
/usr/share/locale-langpack/en@boldquot/LC_MESSAGES/bash.mo
/usr/share/locale-langpack/en@quot/LC_MESSAGES/bash.mo
/usr/share/locale-langpack/en_AU/LC_MESSAGES/bash.mo
/usr/share/locale-langpack/en_CA/LC_MESSAGES/bash.mo
/usr/share/locale-langpack/en_GB/LC_MESSAGES/bash.mo
/usr/share/man/man1/bash.1.gz
/usr/share/man/man1/bashbug.1.gz
/usr/share/man/man1/dh_bash-completion.1.gz
/usr/share/man/man1/rbash.1.gz
/usr/share/man/man7/bash-builtins.7.gz
/usr/share/man/man8/bashreadline-bpfcc.8.gz
/usr/share/man/man8/bashreadline.bt.8.gz
/usr/share/menu/bash
/usr/share/perl5/Debian/Debhelper/Sequence/bash_completion.pm
/usr/share/pkgconfig/bash-completion.pc
/usr/share/zoneinfo/Africa/Lubumbashi
/var/lib/dpkg/info/bash-completion.conffiles
/var/lib/dpkg/info/bash-completion.list
/var/lib/dpkg/info/bash-completion.md5sums
/var/lib/dpkg/info/bash-completion.postinst
/var/lib/dpkg/info/bash-completion.postrm
/var/lib/dpkg/info/bash-completion.preinst
/var/lib/dpkg/info/bash.conffiles
/var/lib/dpkg/info/bash.list
/var/lib/dpkg/info/bash.md5sums
/var/lib/dpkg/info/bash.postinst
/var/lib/dpkg/info/bash.postrm
/var/lib/dpkg/info/bash.prerm
/var/lib/snapd/desktop/bash-completion
/var/lib/snapd/desktop/bash-completion/completions
vishal-pandey@vishal-pandey-VirtualBox:~$
```

```
Get:17 http://in.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [577 kB]
Get:18 http://in.archive.ubuntu.com/ubuntu noble-updates/universe Icons (64x64) [357 kB]
Get:19 http://in.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:20 http://in.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [7,060 B]
Get:21 http://in.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:22 http://in.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [19.2 kB]
Get:23 http://in.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Ign:12 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages
Get:24 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.3 kB]
Get:25 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]
Get:12 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [881 kB]
Fetched 7,700 kB in 2min 16s (56.6 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
35 packages can be upgraded. Run 'apt list --upgradable' to see them.
vishal-pandey@vishal-pandey-VirtualBox:~$
```

Aug 28 00:21



```
vishal-pandey@vishal-pandey-VirtualBox:~$ uname -a
Linux vishal-pandey-VirtualBox 6.14.0-28-generic #28~24.04.1-Ubuntu SMP PREEMPT_DYNAMIC Fri Jul 25 10:47:01 UTC 2 x86_64
x86_64 x86_64 GNU/Linux
vishal-pandey@vishal-pandey-VirtualBox:~$ locate bash
Command 'locate' not found, but can be installed with:
sudo apt install plocate
vishal-pandey@vishal-pandey-VirtualBox:~$ sudo apt update
[sudo] password for vishal-pandey:
Sorry, try again.
[sudo] password for vishal-pandey:
Sorry, try again.
[sudo] password for vishal-pandey:
Hit:1 http://in.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:4 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [1,083 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [1,370 kB]
Get:7 http://in.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [271 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [174 kB]
Get:9 http://in.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [1,773 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [21.6 kB]
Get:11 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
Get:12 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [881 kB]
Get:13 http://in.archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [395 kB]
Get:14 http://in.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:15 http://in.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1,126 kB]
Get:16 http://in.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [288 kB]
Get:17 http://in.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [377 kB]
Get:18 http://in.archive.ubuntu.com/ubuntu noble-updates/universe Icons (64x64) [357 kB]
Get:19 http://in.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:20 http://in.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [7,060 B]
Get:21 http://in.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
```



vishal-pandey@vishal-pandey-VirtualBox: ~



To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

```
vishal-pandey@vishal-pandey-VirtualBox:~$ ls
Desktop    Downloads  Pictures  snap      Videos
Documents  Music     Public    Templates  vp.py
vishal-pandey@vishal-pandey-VirtualBox:~$ pwd
/home/vishal-pandey
vishal-pandey@vishal-pandey-VirtualBox:~$ mkdir enroll_2023BCSE021
vishal-pandey@vishal-pandey-VirtualBox:~$ cd enroll_2023BCSE021
vishal-pandey@vishal-pandey-VirtualBox:~/enroll_2023BCSE021$ rmdir enroll_2023BCSE021
rmdir: failed to remove 'enroll_2023BCSE021': No such file or directory
vishal-pandey@vishal-pandey-VirtualBox:~/enroll_2023BCSE021$ cd ..
vishal-pandey@vishal-pandey-VirtualBox:~$ pwd
/home/vishal-pandey
vishal-pandey@vishal-pandey-VirtualBox:~$ rmdir enroll_2023BCSE021
vishal-pandey@vishal-pandey-VirtualBox:~$ touch vishal.txt
vishal-pandey@vishal-pandey-VirtualBox:~$ touch copyFile.txt
vishal-pandey@vishal-pandey-VirtualBox:~$ cp vishal.txt copyFile.txt
vishal-pandey@vishal-pandey-VirtualBox:~$ mv copyFile.txt movedfile.txt
vishal-pandey@vishal-pandey-VirtualBox:~$ rm movedfile.txt
vishal-pandey@vishal-pandey-VirtualBox:~$ cat vishal.txt
this is the test file. Created using touch vishal.txt
vishal-pandey@vishal-pandey-VirtualBox:~$
```