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Dr Shilpa V
Associate Professor
Department of CSE

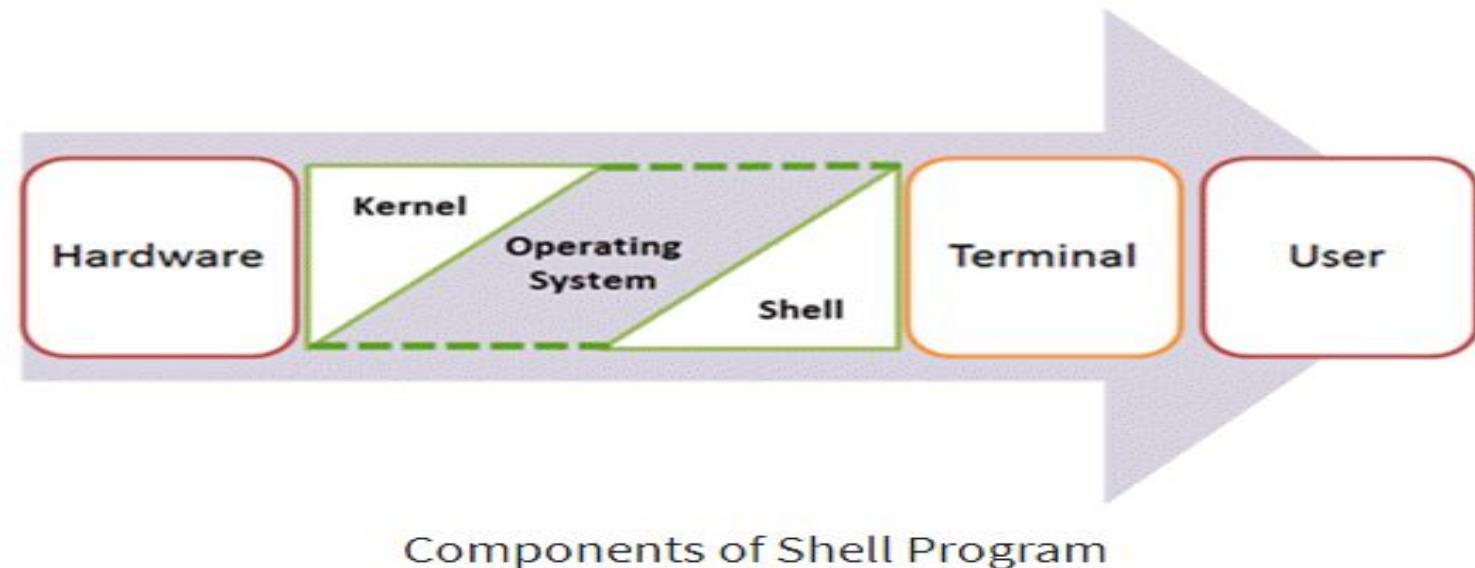
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What is Shell?

- **Shell** is a UNIX term for an interface between a **user** and an **operating system** service. Shell provides users with an interface and accepts human-readable commands into the system and executes those commands which can run automatically and give the program's output in a shell script.
- An Operating is made
 - Kernel
 - Shell





Types of Shell

There are two main shells in Linux:

1. The Bourne Shell: The prompt for this shell is \$ and its derivatives are listed below:

- POSIX shell also is known as sh
- Korn Shell also knew as sh
- Bourne Again SHell also knew as bash

2. The C shell: The prompt for this shell is %, and its subcategories are:

- C shell also is known as csh
- Tops C shell also is known as tcsh



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How to Write Shell Script in Linux/Unix

Shell Scripts are written using text editors. On your Linux system, open a text editor program, open a new file to begin typing a shell script or shell programming, then give the shell permission to execute your shell script and put your script at the location from where the shell can find it.

Let us understand the steps in creating a Shell Script:

1. Create a file using a vi editor.

Name script file with **extension .sh**

1. Start the script with **#! /bin/sh** ("#!" is an operator called **shebang** which directs the script to the **interpreter location**. So, if we use "#! /bin/sh" the script gets directed to the bourne-shell.)

2. Write some code.

3. Save the script file as filename.sh

4. For executing the script type **bash filename.sh**



Let's create a small script –

```
#!/bin/sh
ls
```

Creating a new script file `scriptsample.sh`

```
home@VirtualBox:~$ vi scriptsample.sh
```

Adding the command 'ls' after `#!/bin/sh`

```
#!/bin/sh
ls
```

Executing the script file

```
home@VirtualBox:~$ bash scriptsample.sh
abc          Desktop          newfile   sample
ABC          Documents        newt.txt  script
ABC~         Downloads        Pictures  Temp
abc.bash     examples.desktop Public    test
abcd.sh     help            sample   test
```

Adding shell comments

Adding a comment

```
#!/bin/sh  
# sample scripting  
pwd
```

Shell executes only the command

```
home@VirtualBox:~$ bash scriptsample.sh  
/home/home
```

It ignores the comment # sample scripting



Basic Commands

#ls List of Directories

#ls -l Directories with Information

#whoami Display the current working root directory name

#ls ch*.doc Starts with ch and ends with .doc.

#ls *.doc Display files ends with .doc

#cat FileName Display the contents of the file

#cat -b FileName Display File Content with Line number.

Basic Commands

#wc FileName Display the Number of Lines/Words/Bytes/Filename

#cp Sourcefile DestFile Copy data from Sourcefile to Destination file.

#mv file1 file2 Remove file1 and copy to file2(Rename)

#rm filename Delete file

#rm -r Directoryname if directory is empty it will delete else it will ask permission to delete every directory and file inside the directory.

```
[root@cseise ~]# rm -r class1
rm: descend into directory `class1'? y
rm: descend into directory `class1/class2'? y
rm: remove regular file `class1/class2/unix.sh'? y
rm: remove regular file `class1/class2/filename.txt'? y
rm: remove directory `class1/class2'? y
rm: remove directory `class1'? y
[root@cseise ~]#
```



Shell input & output Redirection

Output Redirection:

- The output from a command normally intended for standard output can be easily diverted to a file instead. This capability is known as output redirection.
- If the notation **> file** is appended to any command that normally writes its output to standard output, the output of that command will be written to file instead of your terminal.

Output Redirection

ls -al >filename

```
home@VirtualBox:~$ ls -al > listings
home@VirtualBox:~$ cat listings
total 324
drwxr-xr-x 26 home home 4096 2012-09-10 10:42 .
drwxr-xr-x  3 root root 4096 2012-09-01 19:43 ..
-rw-rw-r--  1 home home     0 2012-09-10 09:25 abc
```

If there is an existing file with the same name, the redirected command will delete the contents of that file and then it may be overwritten.

Output Redirection (Cont...)

If you do not want a file to be overwritten but want to add more content to an existing file, then you should use ‘**>>**’ operator.

```
home@VirtualBox:~$ cat sample
Hang on for the best Linux Lessons.
home@VirtualBox:~$ echo Thanks for reading >> sample
home@VirtualBox:~$ cat sample
Hang on for the best Linux Lessons.
Thanks for reading
```



Input redirection

The ‘<’ symbol is used for input(STDIN) redirection.

< Input Redirection

```
$ wc -l users  
2 users  
$
```

```
$ wc -l < users  
2  
$
```



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Input redirection

```
$wc -l << EOF
```

```
This is a simple lookup program  
for good (and bad) restaurants  
in Cape Town.
```

```
EOF
```

```
3
```

```
$
```

```
#!/bin/sh
```

```
cat << EOF
```

```
This is a simple lookup program  
for good (and bad) restaurants  
in Cape Town.
```

```
EOF
```



Pipes and Filters

Pipes: You can connect two commands together so that the output from one program becomes the input of the next program. Two or more commands connected in this way form a pipe.

- To make a pipe, put a vertical bar (|) on the command line between two commands.
- When a program takes its input from another program, it performs some operation on that input, and writes the result to the standard output. It is referred to as a filter. Ex: AWK,WC

The grep Command

The grep command searches a file or files for lines that have a certain pattern. The syntax is –

\$grep Pattern file(S)

The name "grep" comes from the ed (a Unix line editor) command g/re/p which means “globally search for a regular expression and print all lines containing it”.



GREP Command

```
$ls -l | grep "Aug"
```

```
-rw-rw-rw- 1 john doc 11008 Aug 6 14:10 ch02  
-rw-rw-rw- 1 john doc 8515 Aug 6 15:30 ch07  
-rw-rw-r-- 1 john doc 2488 Aug 15 10:51 intro  
-rw-rw-r-- 1 carol doc 1605 Aug 23 07:35 macros
```

```
$
```

There are various options which you can use along with the grep command –

```
$ls -l | grep -i "carol.*aug"  
-rw-rw-r-- 1 carol doc 1605 Aug 23 07:35 macros $
```

SI.NO		Option & Description
1	-v	Prints all lines that do not match pattern
2	-n	Prints the matched line and its line number.
3	-l	Prints only the names of files with matching lines (letter "l")
4	-c	Prints only the count of matching lines
5	-i	Matches either upper or lowercase.



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Thank you



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MODULE 2

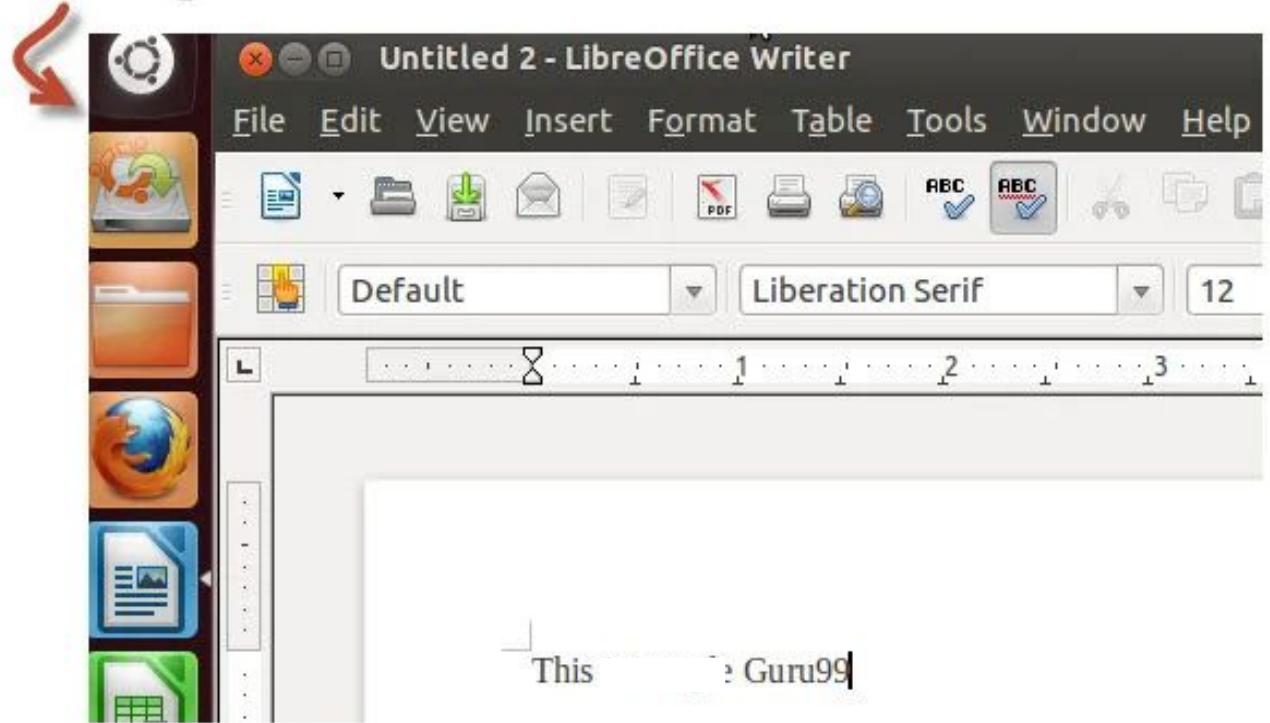


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What is a Process?

- An instance of a program is called a Process. In simple terms, any command that you give to your Linux machine starts a new process.

When you launch Office to write some article



Corresponding process is created

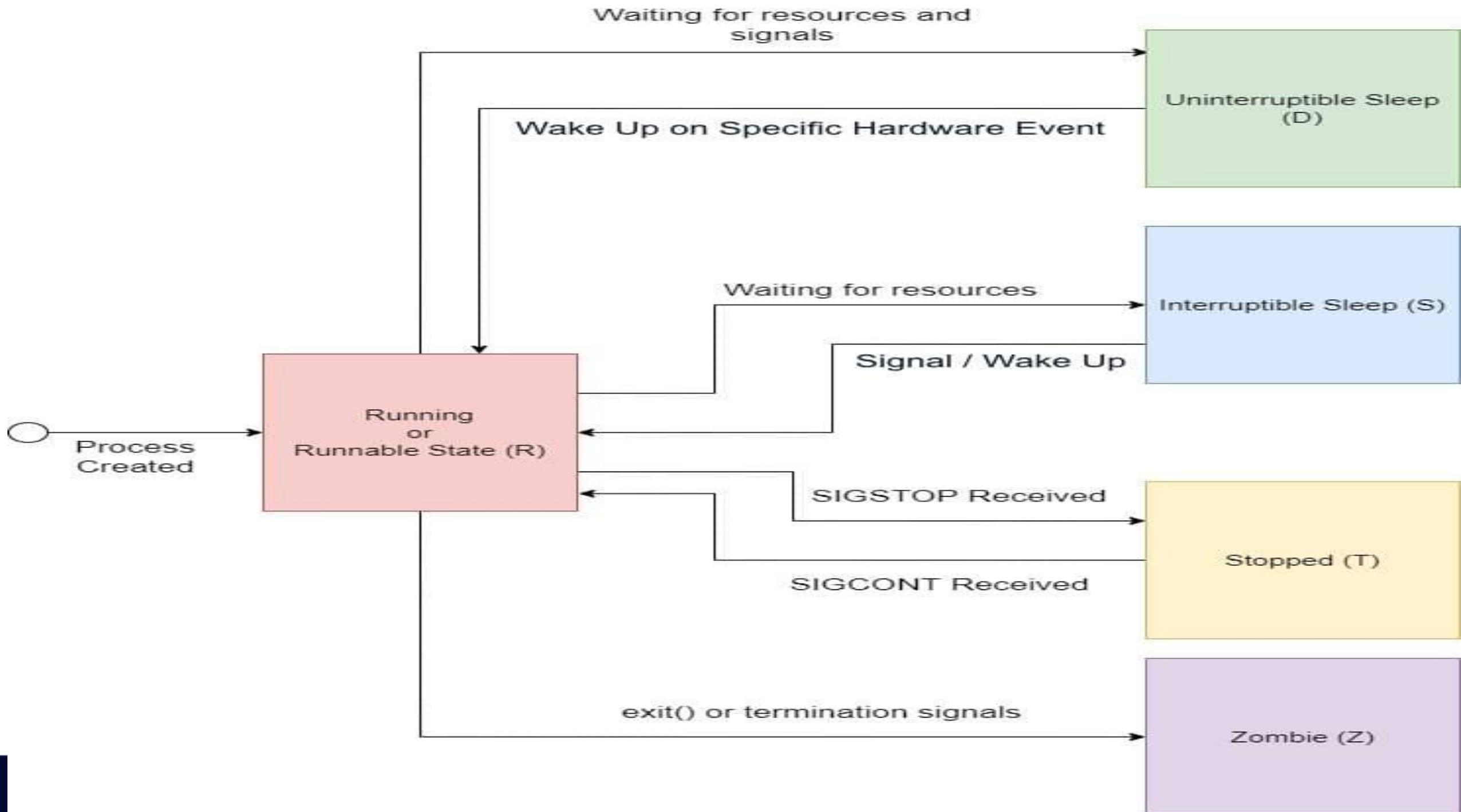


Types of Processes:

- **Foreground Processes:** They run on the screen and need input from the user. For example Office Programs.
- \$fg
- **Background Processes:** They run in the background and usually do not need user input. For example Antivirus.
- \$bg

Linux Process States

- In Linux, a process is an instance of executing a program or command. While these processes exist, they'll be in one of the five possible states:
- **Running or Runnable (R)**
- **Uninterruptible Sleep (D)**
- **Interruptable Sleep (S)**
- **Stopped (T)**
- **Zombie (Z)**





Field	Description	Example 1	Example 2
PID	The process ID of each task	1525	961
User	The username of task owner	Home	Root
PR	Priority Can be 20(highest) or -20(lowest)	20	20
NI	The nice value of a task	0	0
VIRT	Virtual memory used (kb)	1775	75972
RES	Physical memory used (kb)	100	51
SHR	Shared memory used (kb)	28	7952

S

Status

There are five types:

‘D’ = uninterruptible sleep

‘R’ = running

S

R

‘S’ = sleeping

‘T’ = traced or stopped

‘Z’ = zombie



%CPU	% of CPU time	1.7	1.0
%MEM	Physical memory used	10	5.1
TIME+	Total CPU time	5:05.34	2:23.42
Command	Command name	Photoshop.exe	Xorg

- This command stands for ‘Process Status’. It is similar to the “Task Manager” that pop-ups in a Windows Machine when we use Cntrl+Alt+Del.
- To check all the processes running under a user, use the command –
- **\$ ps us**

USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
home	1114	0.0	0.8	46548	8512	?	Ssl	Sep03	0:00	gnome-sess
home	1151	0.0	0.0	3856	140	?	Ss	Sep03	0:00	/usr/bin/s
home	1154	0.0	0.0	3748	484	?	S	Sep03	0:00	/usr/bin/d
home	1155	0.1	0.2	6656	3036	?	Ss	Sep03	0:18	//bin/dbus
home	1157	0.0	0.2	9148	2368	?	S	Sep03	0:00	/usr/lib/g
home	1162	0.0	0.2	31588	2296	?	Ssl	Sep03	0:00	/usr/lib/g
home	1174	0.0	1.4	132472	14984	?	S1	Sep03	0:03	/usr/lib/g

- You can also check the process status of a single process, use the syntax

```
$ ps PID
guru99@VirtualBox:~$ ps 1268
 PID TTY      STAT   TIME COMMAND
 1268 ?        S<l     0:02 /usr/bin/pulseaudio --start --log-target=syslog
```

top

- This utility tells the user about all the running processes on the Linux machine. Press 'q' on the keyboard to move out of the process

```
home@VirtualBox:~$ top
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1525	home	20	0	1775m	100m	28m	S	1.7	10.0	5:05.34	Photoshop.exe
961	root	20	0	75972	51m	7952	R	1.0	5.1	2:23.42	Xorg
1507	home	20	0	7644	4652	696	S	1.0	0.5	2:42.66	wineserver
1564	home	20	0	75144	29m	9840	S	0.3	3.0	0:25.96	ubuntuone-syncd
2999	home	20	0	127m	13m	10m	S	0.3	1.4	0:01.36	gnome-terminal
3077	home	20	0	2820	1188	864	R	0.3	0.1	0:00.76	top
1	root	20	0	3200	1704	1260	S	0.0	0.2	0:00.98	init
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kthreadd
3	root	20	0	0	0	0	S	0.0	0.0	0:00.95	ksoftirqd/0

Kill

- This command **terminates running processes** on a Linux machine.
- To use these utilities you need to know the PID (process id) of the process you want to kill
 - **\$kill PID**
 - To find the PID of a process simply type
 - \$pidof process name

```
home@VirtualBox:~$ pidof Photoshop.exe
1525
home@VirtualBox:~$ kill 1525
```



pkill

```
$ pkill firefox
```

NICE

- Linux can run a lot of processes at a time, which can slow down the speed of some high priority processes and result in poor performance.
- To avoid this, you can tell your machine to prioritize processes as per your requirements.
- This priority is called Niceness in Linux, and it has a value between -20 to 19. The lower the Niceness index, the higher would be a priority given to that task.
- The default value of all the processes is 0.
- To start a process with a niceness value other than the default value use the following syntax

```
home@VirtualBox:~$ nice -n 19 banshee
```



- If there is some process already running on the system, then you can ‘Renice’ its value using syntax.
- **\$renice 'nice value' -p 'PID'**
- To change Niceness, you can use the ‘top’ command to determine the PID (process id) and its Nice value. Later use the renice command to change the value.

Checking the niceness value of the process 'banshee'

PID	USER	PR	NI	VIRT	RES	SHR	S %CPU	%MEM	TIME+	COMMAND
3293	home	20	0	277m	64m	35m	S 96.4	6.4	9:56.72	banshee

Renicing the value to -20

```
home@VirtualBox:~$ sudo renice -20 -p 3293
[sudo] password for home:
3293 (process ID) old priority 0, new priority -20
```

The value changed to -20

3293	home	0	-20	277m	64m	35m	S 95.2	6.4	3:32.95	banshee
------	------	---	-----	------	-----	-----	--------	-----	---------	---------



CORN

CORN is a system process running on a linux system and has a responsibility to detect and execute a certain cron job in a given time period. Cron job is any defined task to run in a given time period. It can be a shell script or a simple bash command. Cron job helps us automate our routine task, it can be hourly, daily, monthly or given interval of period.

CRON

- \$ sudo systemctl status cron.service

```
cseise@cseise ~/Desktop $ sudo systemctl status cron.service
● cron.service - Regular background program processing daemon
  Loaded: loaded (/lib/systemd/system/cron.service; enabled; vendor preset: enabled)
  Active: active (running) since Mon 2024-09-23 20:38:37 IST; 3min 35s ago
    Docs: man:cron(8)
   Main PID: 889 (cron)
     CGroup: /system.slice/cron.service
             └─889 /usr/sbin/cron -f

Sep 23 20:38:37 cseise systemd[1]: Started Regular background program processing daemon.
Sep 23 20:38:37 cseise cron[889]: (CRON) INFO (pidfile fd = 3)
Sep 23 20:38:37 cseise cron[889]: (CRON) INFO (Running @reboot jobs)
```

crontab -l //check existing cron jobs

```
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow command
```

crontab -e // add or modified the existing cron job

```
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h  dom mon dow   command
 9 21:00 23 9 2   hello.txt
```

AT Command

- \$ at -f hello now + 1 hour
- \$ atq
- \$date
- \$ at -f hello 13:09 Monday

```
cseise@cseise ~/Desktop $ at -f hello
Garbled time
cseise@cseise ~/Desktop $ at -f hello now
warning: commands will be executed using /bin/sh
job 4 at Mon Sep 23 20:49:00 2024
cseise@cseise ~/Desktop $
```

Files in Linux

- In Linux, everything is considered as a file. In UNIX, seven standard file types are regular, directory, symbolic link, FIFO special, block special, character special, and socket. In Linux/UNIX, we have to deal with different file types to manage them efficiently.
- In Linux/UNIX, Files are mainly categorized into 3 parts:
 1. Regular Files
 2. Directory Files
 3. Special Files
- The easiest way to find out file type in any operating system is by looking at its extension such as .txt, .sh, .py, etc.

file file.txt

```
shantanu@shantanu-Dell-System-XPS-L502X:~/Desktop/GFG$ file file.txt
file.txt: ASCII text
shantanu@shantanu-Dell-System-XPS-L502X:~/Desktop/GFG$ █
```

cat file.txt
file -f file.txt

```
shantanu@shantanu-Dell-System-XPS-L502X:~/Desktop/GFG$ cat file.txt
./shantanu.txt
./AAAA
shantanu@shantanu-Dell-System-XPS-L502X:~/Desktop/GFG$ file -f file.txt
./shantanu.txt: ASCII text
./AAAA: directory
shantanu@shantanu-Dell-System-XPS-L502X:~/Desktop/GFG$ █
```




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Module 3

How to create, delete, and modify groups

Linux

- Groups are an essential part of the Linux permission structure and a powerful way to manage file access on your system.
- In Linux, groups are collections of users. Creating and managing groups is one of the simplest ways to deal with multiple users simultaneously, especially when dealing with permissions. The /etc/group file stores group information and is the default configuration file.

How to create, delete, and modify groups in Linux

- Linux admins use groups to assign access to files and other resources. Every group has a unique ID listed in the **/etc/group** file, along with the group name and members. The first groups listed in this file are system groups because the distribution maintainers preconfigure them for system activities.
- Each user may belong to one primary group and any number of secondary groups. When you create a user on Linux using the **useradd** command, a group with the same name as the username is also created, and the user is added as the group's sole member. This group is the user's primary group.

Create and modify groups

To add a group in Linux, use

t' 

```
$ sudo groupadd demo
```

When a group is created, a unique group ID gets assigned to that group. You can verify that the group appears (and see its group ID) by looking in the `/etc/group` file.



Group id

If you want to create a group with a specific group ID (GID), use the `--gid` or `-g` option:

```
$ sudo groupadd -g 1009 demo1
```

If group ID 1009 is already allocated to another group, you're alerted that the GID is unavailable and the operation aborts. Rerun it with a different group ID number:

```
$ sudo groupadd -g 1010 demo1
```



Change the group ID

You can change the group ID of any group with the `groupmod` command and the `--gid` or `-g` option:

```
$ sudo groupmod -g 1011 demo1
```

Rename a group

You can rename a group using `groupmod` with the `--new-name` or `-n` option:

```
$ sudo groupmod -n test demo1
```

Verify all these changes from the `/etc/group` file.



Add users to a group

3. The command to add a user. *useradd command* adds a new user to the directory. The user is given the ID automatically depending on which category it falls in. The username of the user will be as provided by us in the command.

```
sudo useradd username
```

```
cseise@cseise ~/Desktop $ sudo useradd shilpa
[sudo] password for cseise:
cseise@cseise ~/Desktop $ id shilpa
uid=1001(shilpa) gid=1004(shilpa) groups=1004(shilpa)
cseise@cseise ~/Desktop $
```

Add and remove users from a group

Suppose you have existing users named **user1** and **user2**, and you want to add them to the **demo** group. Use the **usermod** command with the **--append --groups** options (**-a** and **-G** for short):

```
$ sudo usermod --append --groups demo user1
$ sudo usermod -aG demo user2
```

Look in the **/etc/group** file or use the **id** command to confirm your changes:

```
$ id user1
uid=1005(user1) gid=1005(user1) groups=100(users),1009(demo)
```

Remove a specific user from a group

To remove a specific user from a group, you can use the `gpasswd` command to modify group information:

```
$ sudo gpasswd --delete user1 demo
```

Alternatively, manually edit the `/etc/group` file and remove the user from any number of groups.



Delete a group

When a group is no longer needed, you delete it by using the `groupdel` command:

```
$ sudo groupdel demo
```

Module-4 and 5

```
git init
git add .
git commit -m "commit message"
git branch -M main
git remote add origin <GitHub link>
git push -u origin main
```

```
git checkout -b my-new-branch
git add .
git commit -m "New branch"
git push -u origin my-new-branch
```



Create your first project

Ready to start building? Create a repository for a new idea or bring over an existing repository to keep contributing to it.

[Create repository](#)[Import repository](#)

Recent activity

When you take actions across GitHub, we'll provide links to that activity here.

[For you](#) Beta[Following](#)[Send feedback](#)

Filter ▾

Start writing code

...

Start a new repository

A repository contains all of your project's files, revision history, and collaborator discussion.

wscubegaurav /

name your new repository...



Public

Anyone on the internet can see this repository



Private

You choose who can see and commit to this repository

[Create a new repository](#)

Introduce yourself with a profile README

Share information about yourself by creating a profile README, which appears at the top of your profile page.

wscubegaurav / README.md

[Create](#)

- 1 - 🌟 Hi, I'm @wscubegaurav
- 2 - 🎓 I'm interested in ...
- 3 - 🌱 I'm currently learning ...
- 4 - ❤️ I'm looking to collaborate on ...
- 5 - 💬 How to reach me ...
- 6



Use tools of the trade

...

Simplify your development workflow with a GUI



Install GitHub Desktop to visualize, commit, and push changes without ever touching the command line.

Get AI-based coding suggestions



Try GitHub Copilot free for 30 days, which suggests entire functions in real time, right from your editor.

ICH

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository](#).

Required fields are marked with an asterisk (*).

Owner *



Repository name *

Great repository names are short and memorable. Need inspiration? How about [fluffy-pancake](#)?

Description (optional)

 Public

Anyone on the internet can see this repository. You choose who can commit.

 Private

You choose who can see and commit to this repository.

Initialize this repository with:

Add a README file

This is where you can write a long description for your project. [Learn more about READMEs](#).

Add .gitignore



Choose which files not to track from a list of templates. [Learn more about ignoring files](#).

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Public

Anyone on the internet can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.

Initialize this repository with:

Add a README file

This is where you can write a long description for your project. [Learn more about READMEs.](#)

Add .gitignore

.gitignore template: [None](#) ▾

Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)

Choose a license

License: [None](#) ▾

A license tells others what they can and can't do with your code. [Learn more about licenses.](#)

This will set `main` as the default branch. Change the default name in your settings.

You are creating a public repository in your personal account.

Creating repository...

**demo_wscube**

Public

[Pin](#)[Unwatch 1](#)[main](#) ▾

1 branch

0 tags

[Go to file](#)[Add file](#) ▾[Code](#) ▾

wscubegaurav Initial commit

33646ec now 1 commit



README.md

Initial commit

now

README.md

**demo_wscube**



demo_wscube

Public

Pin

Unwatch 1

main ▾

1 branch 0 tags

Go to file

Add file ▾

Code ▾

Create new file

Upload files

1 commit



wscubegaurav Initial commit

README.md

Initial commit

now

README.md



demo_wscube



demo_wscube

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Pin

Unwatch 1

main ▾

1 branch

0 tags

Go to file

Add file ▾

Code ▾



wscubegaurav Initial commit

Create new file

Upload files

1 commit

README.md

Initial commit

now

README.md



demo_wscube

demo_wscube /



Drag files here to add them to your repository

Or [choose your files](#)



Open

X

← → ▼ ▲📁 > This PC > New Volume (D:) > google photos project > pro_efficient▼ ⟳

Search pro_efficient



Organize ▾ New folder

☰ ?

📁 New folder

📁 Documents

🎵 Music

🎥 Videos

📁 wedding video

📁 deep learning

📁 python_student_

📁 computer mous

▼ This PC

▶ D:\

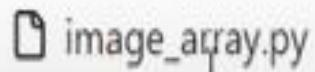
Name	Date modified	Type	Size
all_module.py	11-08-2023 03:53 PM	Python File	1 KB
gui.py	11-08-2023 03:54 PM	Python File	2 KB
image_array.py	11-08-2023 03:56 PM	Python File	4 KB
image_cluster.py	11-08-2023 03:50 PM	Python File	3 KB
make_roi.py	11-08-2023 03:50 PM	Python File	2 KB

demo_wscube /



Drag additional files here to add them to your repository

Or choose your files



image_array.py

Uploading 4 of 5 files



all modules



Drag additional files here to add them to your repository

Or choose your files

all_module.py

gui.py

image_array.py

image_cluster.py

make_roi.py



Commit changes

Add files via upload

Add an optional extended description...

Commit directly to the `main` branch.

Create a new branch for this commit and start a pull request. Learn more about pull requests.

Commit changes

Cancel



demo_wscube

Public

Pin

Unwatch 1

main

1 branch

0 tags

Go to file

Add file

Code



wscubegaurav Add files via upload

5fc14ba now

2 commits

README.md

Initial commit

2 minutes ago

all_module.py

Add files via upload

now

gui.py

Add files via upload

now

image_array.py

Add files via upload

now

image_cluster.py

Add files via upload

now

make_roi.py

Add files via upload

now

README.md





wscubegaurav / demo_wscube

Type to search



Code Issues Pull requests Actions Projects Wiki Security Insights Settings



demo_wscube / README.md in main

Cancel changes

Commit changes...

main



Go to file



Edit

Preview

Spaces

2

Soft wrap

```
1 # demo_wscube  
2
```

README.md

all_module.py

gui.py

wscubeyouruv / demo_wscube

Type [] to search

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Files

main

Go to file

README.md

all_module.py

gui.py

image_array.py

image_cluster.py

make_roi.py

cumentation • Share feedback

demo_wscube / README.md

Edit Preview

```
1 # demo_wscube
2 test
```

Commit changes

Commit message

Update README.md

Extended description

Add an optional extended description..

Commit directly to the main branch

Create a new branch for this commit and start a pull request

Learn more about pull requests

Cancel Commit changes

github.com/wscubegaurav/demo_wscube/blob/main/README.md

wscubegaurav / demo_wscube

Type ⌘ to search

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Files

main Go to file

README.md all_module.py gui.py image_array.py image_cluster.py make_roi.py

demo_wscube / README.md

wscubegaurav Update README.md

Preview Code Blame 2 lines (2 loc) · 19 Bytes

demo_wscube

test

Documentation • Share feedback



wscubegaurav / demo_wscube

Type / to search

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)

demo_wscube

Public

[Pin](#)[Unwatch](#)[main](#) ▾[1 branch](#)[0 tags](#)[Go to file](#)[Add file](#) ▾[Code](#) ▾

wscubegaurav Update README.md

cac6ecd 2 minutes ago [3 commits](#)

README.md

Update README.md

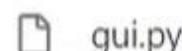
2 minutes ago



all_module.py

Add files via upload

2 minutes ago



gui.py

Add files via upload

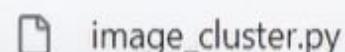
2 minutes ago



image_array.py

Add files via upload

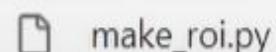
2 minutes ago



image_cluster.py

Add files via upload

2 minutes ago



make_roi.py

Add files via upload

2 minutes ago



wscubegaurav / demo_wscube

Type / to search

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)

demo_wscube

Public



Unwatch 1

main ▾

1 branch

0 tags

Go to file

Add file ▾

< > Code ▾



wscubegaurav Update README.md

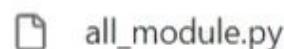
cac6ecd 2 minutes ago

3 commits



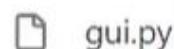
README.md Update README.md

2 minutes ago



all_module.py Add files via upload

2 minutes ago



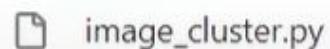
gui.py Add files via upload

2 minutes ago



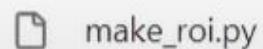
image_array.py Add files via upload

2 minutes ago



image_cluster.py Add files via upload

2 minutes ago



make_roi.py Add files via upload

2 minutes ago

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Create



wscubegaurav / demo_wscube Type to search

Code Issues Pull requests Actions Projects Security Insights

demo_wscube Public Watch 1

main 1 branch 0 tags Go to file Add file < Code

File	Action
README.md	Update README.md
all_module.py	Add files via upload
gui.py	Add files via upload
image_array.py	Add files via upload
image_cluster.py	Add files via upload
make_roi.py	Add files via upload

Local Codespaces

Clone ?

HTTPS SSH GitHub CLI

https://github.com/wscubegaurav/demo_wscube.g

Use Git or checkout with SVN using the web URL.

Open with GitHub Desktop

Download ZIP

README.md



git --distributed-is-the-new-centralized



Search entire site...

About

Documentation

Downloads

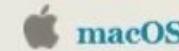
GUI Clients

Logos

Community

The entire [Pro Git book](#) written by Scott Chacon and Ben Straub is available to [read online for free](#). Dead tree versions are available on [Amazon.com](#).

Downloads



macOS



Windows



Linux/Unix

Older releases are available and the [Git source repository](#) is on GitHub.

GUI Clients

Git comes with built-in GUI tools ([git-gui](#), [gitk](#)), but there are several third-party tools for users looking for a platform-specific experience.

[View GUI Clients →](#)



Logos

Various Git logos in PNG (bitmap) and EPS (vector) formats are available for use in online and print projects.

[View Logos →](#)

**git**

--distributed-is-the-new-centralized



Search entire site...

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The entire [Pro Git book](#) written by Scott Chacon and Ben Straub is available to [read online for free](#). Dead tree versions are available on [Amazon.com](#).

Download for Windows

[Click here to download](#) the latest (2.42.0) 64-bit version of Git for Windows. This is the most recent [maintained build](#). It was released [about 12 hours ago](#), on 2023-08-21.

Other Git for Windows downloads

[Standalone Installer](#)[32-bit Git for Windows Setup.](#)[64-bit Git for Windows Setup.](#)[Portable \("thumbdrive edition"\)](#)[32-bit Git for Windows Portable.](#)[64-bit Git for Windows Portable.](#)

Using winget tool

Install [winget tool](#) if you don't already have it, then type this command in command prompt or Powershell.

```
winget install --id Git.Git -e --source winget
```

The current source code release is version 2.42.0. If you want the newer version, you can build it from t

← → ▼ ↑

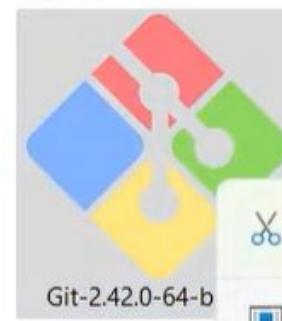
Download This PC > OS (C:) > Users > WSCUBETECH > Downloads >

- Home
- OneDrive - Personal
- Desktop
- Documents
- Pictures

- Desktop
- Downloads
- Pictures
- New folder
- Documents
- Music
- Videos
- wedding video
- deep learning
- python_student_
- computer mouse

- This PC
- OS (C:)

Today



Git-2.42.0-64-bit

Yesterday



demo (1).pdf

Open Enter

Run as administrator

Pin to Start

Add to Favorites

Compress to ZIP file

Copy as path Ctrl+Shift+C

Properties Alt+Enter

Share with Skype

Show more options

Last week



loan.csv



B.Tech_DS_3___4_Semester_Session_2021-22_Scheme_Syllabus (1).pdf



B.Tech_DS_3___4_Semester_Session_2021-22_Scheme_Syllabus (1).pdf



Let Us Python.pdf



DATA SCIENCE
RESUME.pdf



Documents



Compressed



Video

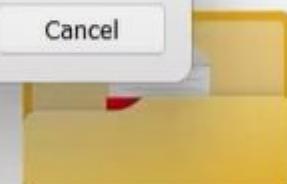
▼ Today



▼ Yesterday



▼ Last week



Git 2.42.0 Setup

Information

Please read the following important information before continuing.

When you are ready to continue with Setup, click Next.

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.
59 Temple Place - Suite 330, Boston, MA 02111-1307, USA

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Preamble

The licenses for most software are designed to take away your
freedom to share and change it. By contrast, the GNU General Public
License is intended to guarantee your freedom to share and change
free software--to make sure the software is free for all its users.
This General Public License applies to most of the Free Software

<https://gitforwindows.org/>

Next Cancel



Git 2.0.0-64-bit.exe



Programs



demo(1).py



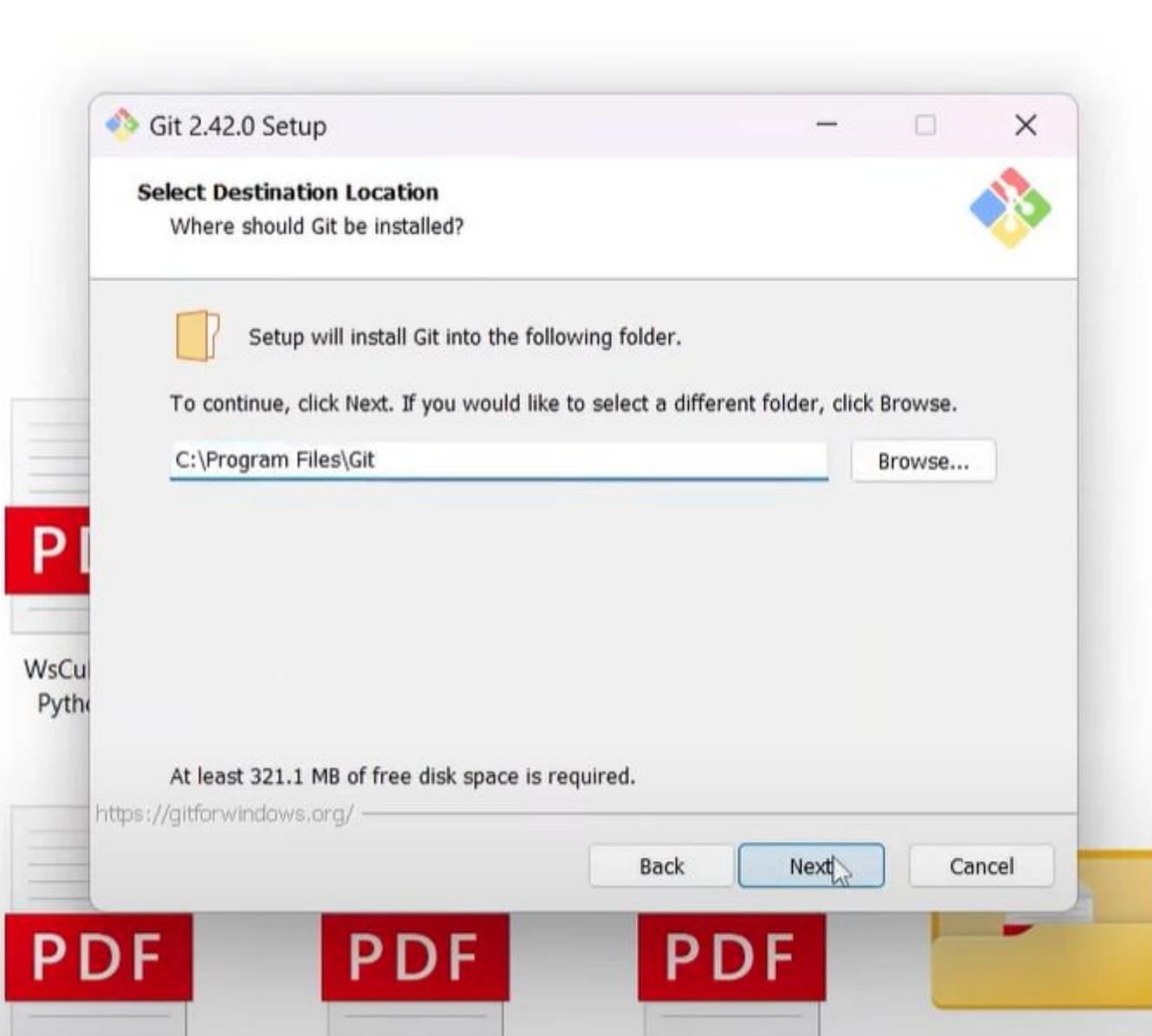
demo.py



loan.csv



B.Tech_DS_3__4_Semester_Session_2021-22_Scheme_Syllabus (1).pdf



B.Tech_DS_3__4_Semester_Session_2021-22_Scheme_Syllabus (1).pdf

Let Us Python.pdf

DATA SCINCE RESUME.pdf

Documents

✓ Today



Programs

✓ Yesterday



demo (1).py



demo.py



WsCul
Python

<https://gitforwindows.org/>

Git 2.42.0 Setup

Select Destination Location

Where should Git be installed?



Setup will install Git into the following folder.

Folder Exists



The folder:

C:\Program Files\Git

already exists. Would you like to install to that folder anyway?

Yes

No

Back

Next

Cancel

✓ Last week



loan.csv



B.Tech_DS_3__4_Semester_Session_2021-22_Scheme_Syllabus (1)
(1).pdf



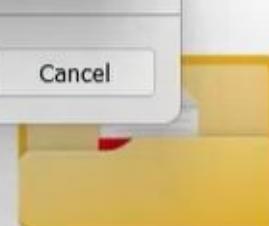
B.Tech_DS_3__4_Semester_Session_2021-22_Scheme_Syllabus (1).pdf



Let Us Python.pdf

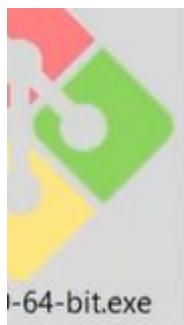


DATA SCINCE
RESUME.pdf



Documents

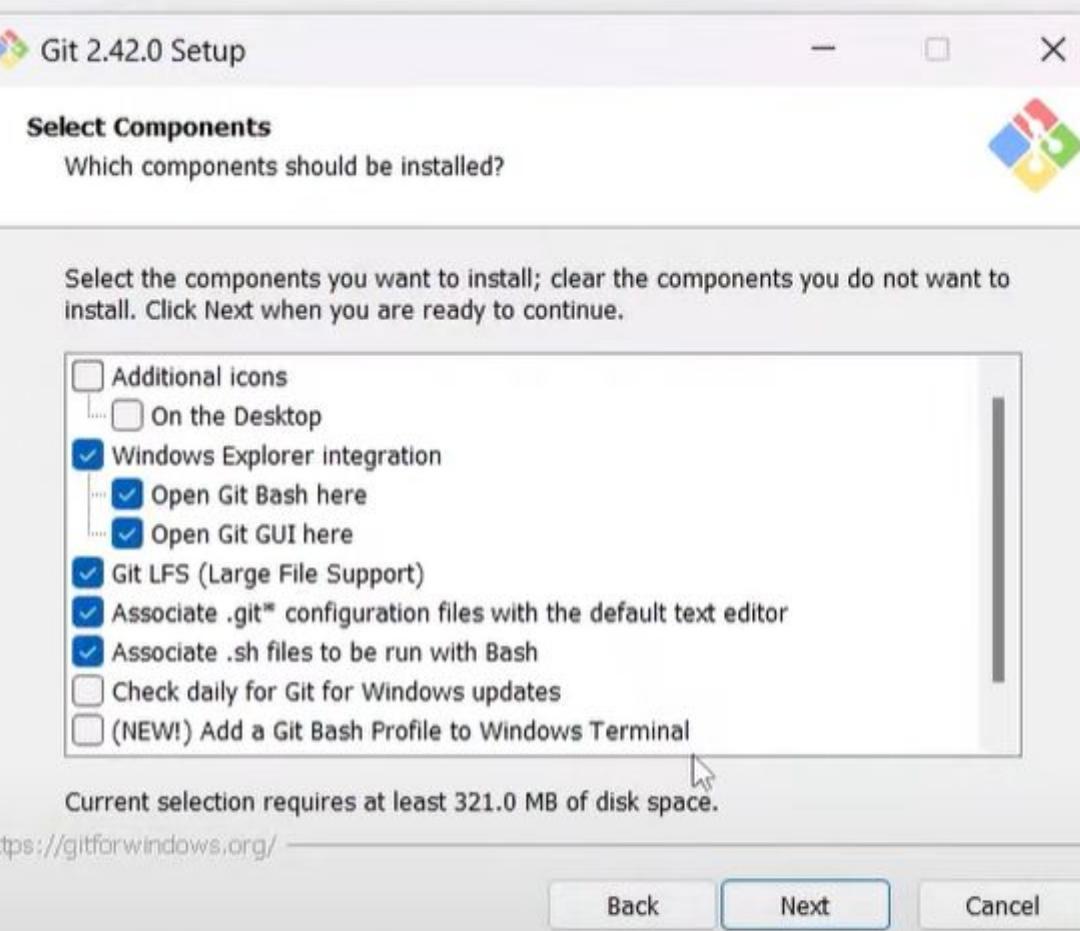
✓ Earlier this month



Programs



Python



month



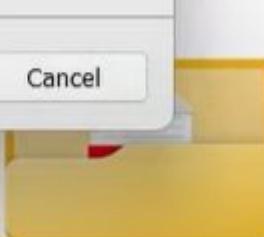
B.Tech_DS_3__4_Semester_Session_2021-22_Scheme_Syllabus (1).pdf



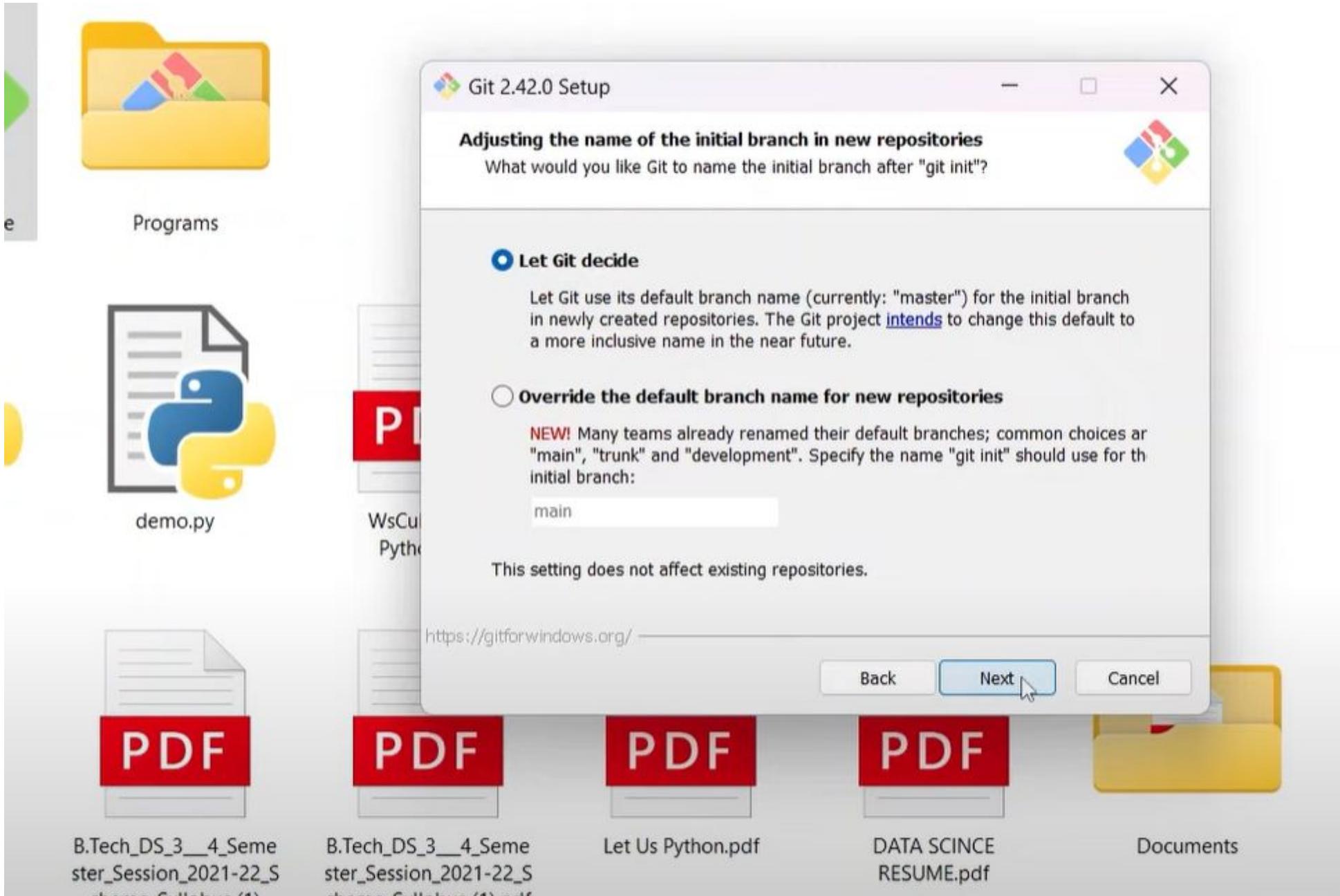
B.Tech_DS_3__4_Semester_Session_2021-22_Scheme_Syllabus (1).pdf



Let Us Python.pdf

DATA SCIENCE
RESUME.pdf

Documents





42.0-64-bit.exe

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Programs



emo (1).py



demo.py



WsCu
Pytho



Pytho



loan.csv



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(1).pdf



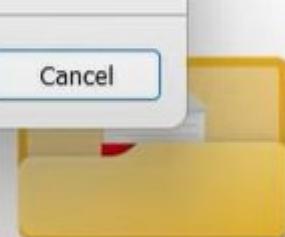
B.Tech_DS_3__4_Seme
ster_Session_2021-22_S
cheme_Syllabus (1).pdf



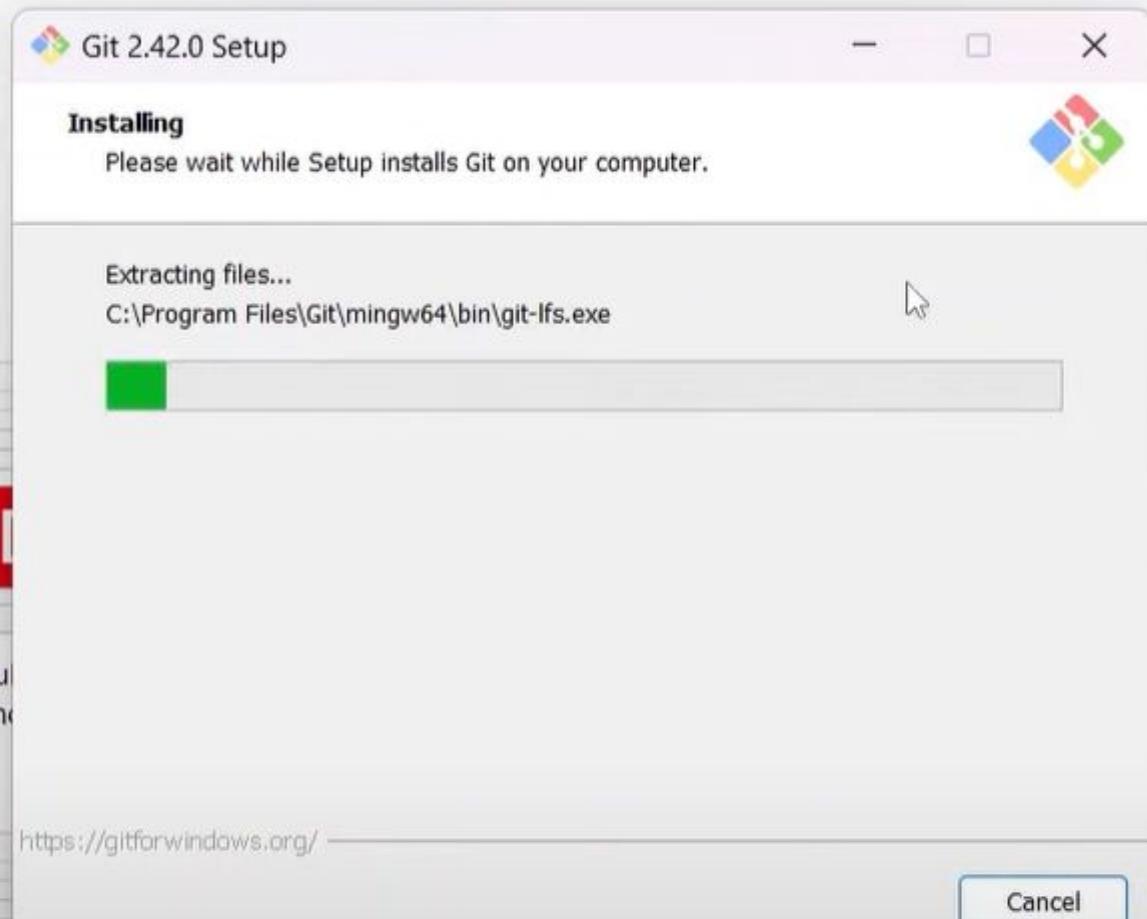
Let Us Python.pdf



DATA SCINCE
RESUME.pdf



Documents





git.txt

x

+

File Edit View

```
git init
git add .
git commit -m "commit message"
git branch -M main
git remote add origin <GitHub link>
git push -u origin main
```

```
git checkout -b my-new-branch
git add .
git commit -m "New branch"
git push -u origin my-new-branch
```

Create blank repository- **test_wscube**

The screenshot shows a GitHub repository page for a public repository named "test_wscube". The repository has one branch ("main") and no tags. A single commit was made by "wscubegaurav" titled "Initial commit" at 651c1f8, 10 minutes ago. The commit message is "Initial commit". The README.md file contains the text "test_wscube".

test_wscube Public

Pin Unwatch

main 1 branch 0 tags

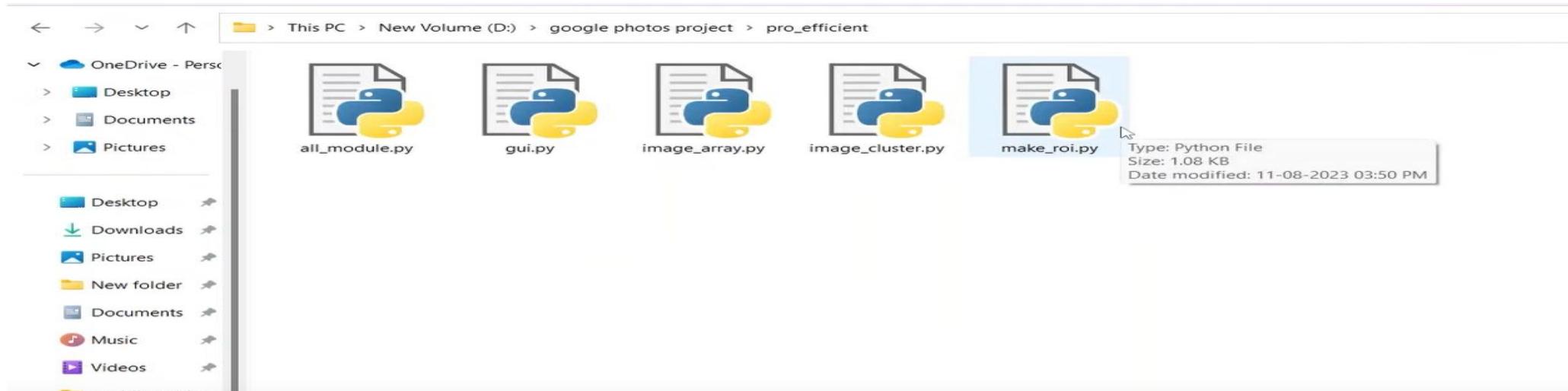
Go to file Add file Code

wscubegaurav Initial commit 651c1f8 10 minutes ago 1 commit

README.md Initial commit 10 minutes ago

README.md

test_wscube



Name	Date modified	Type	Size
New folder	22-08-2023 01:46 PM	File folder	
New folder (2)	22-08-2023 01:46 PM	File folder	

A screenshot of a Windows File Explorer window. The address bar shows the path: This PC > New Volume (D:) > google photos project > pro_efficient - Copy >. The left sidebar shows a tree view of the file structure under OneDrive - Personal. The main area displays a table with two entries: 'New folder' and 'New folder (2)', both created on 22-08-2023 at 01:46 PM and categorized as 'File folder'. The table has columns for Name, Date modified, Type, and Size.

← → ▼ ↑

📁 > This PC > New Volume (D:) > google photos project > pro_efficient - Copy >

⌄ OneDrive - Perso

⌄ Desktop

⌄ Documents

⌄ Pictures

⌄ Desktop

⌄ Downloads

⌄ Pictures

⌄ New folder

⌄ Documents

⌄ Music

⌄ Videos

⌄ wedding video

⌄ deep learning

⌄ python_student_

⌄ computer mous

⌄ This PC

Name

Date modified

Type

Size

📁 New folder

22-08-2023 01:46 PM

File folder

📁 New folder (2)

22-08-2023 01:46 PM

File folder

View

Sort by

Group by

Refresh

Customize this folder...

Paste

Paste shortcut

Undo Move

Ctrl+Z

⌄ Open in Terminal

⌄ Open with Visual Studio

⌄ Open Git GUI here

⌄ Open Git Bash here

Give access to

New

Properties

pro_efficient - Copy

MINGW64:/d/google photos project/pro_efficient - Copy

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google photos project/pro_efficient - Copy
$
```

←

↓

→

→

→

New folder

Documents

Music

Size

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d
$ git init
Initialized empty Git repository in D
:/google photos project/pro_efficient
- Copy/.git/
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d
/google photos project/pro_efficient
- Copy (master)
$ |
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
$ git init
Initialized empty Git repository in D
:/google photos project/pro_efficient
- Copy/.git/
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d
/google photos project/pro_efficient
- Copy (master)
$ git add .
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
photos project/pro_efficient - Copy (master)
$
```

- Copy/.git/

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d
/google photos project/pro_efficient
- Copy (master)
$ git add .
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
photos project/pro_efficient - Copy (master)
$ git commit -m "add files"
[master (root-commit) d7eda69] add files
 5 files changed, 267 insertions(+)
 create mode 100644 New folder (2)/image_ar
ray.py
 create mode 100644 New folder (2)/image_clu
ster.py
 create mode 100644 New folder (2)/make_roi.
py
 create mode 100644 New folder/all_module.py
 create mode 100644 New folder/gui.py
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
photos project/pro_efficient - Copy (master)
$
```

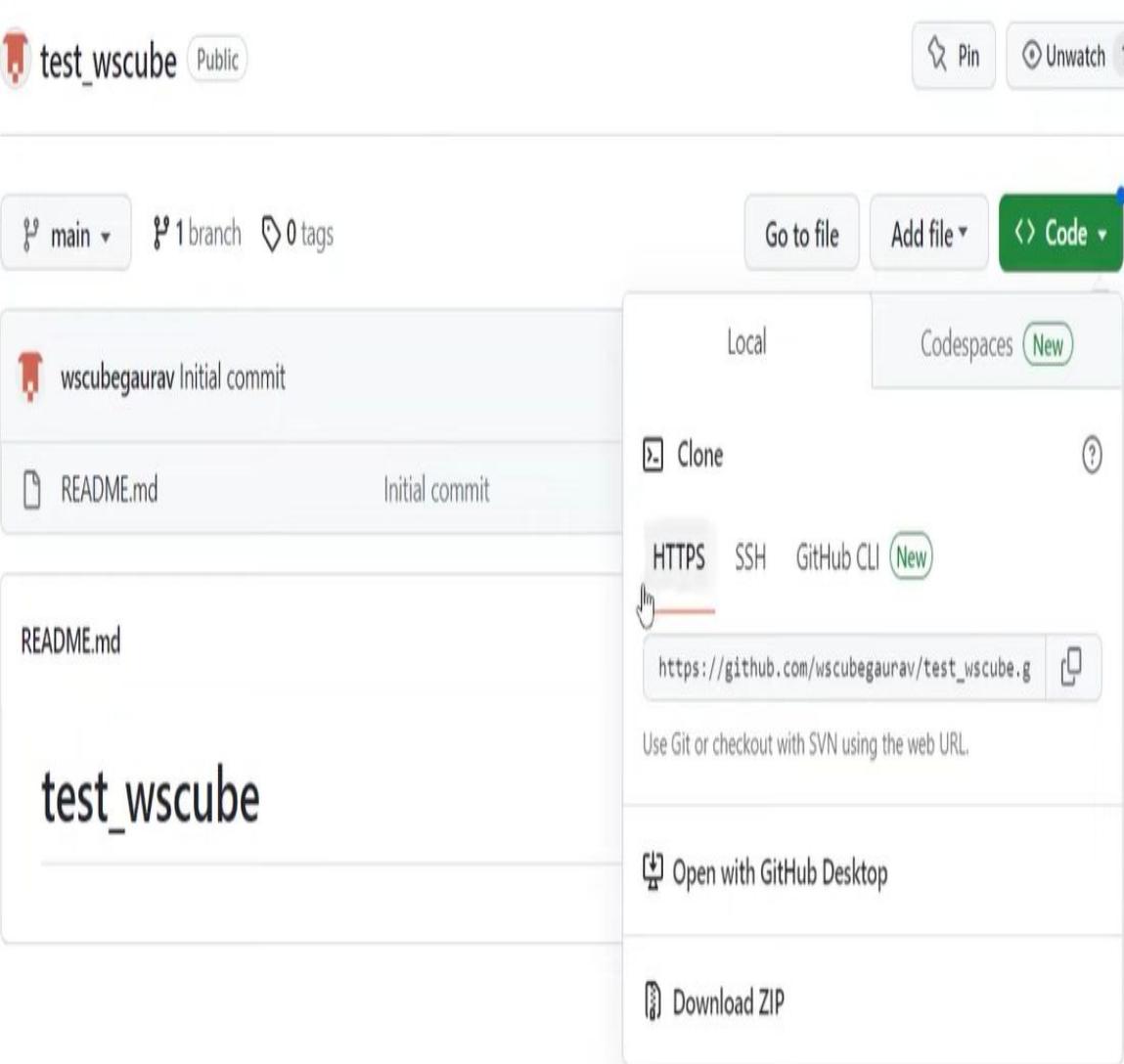
```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
photos project/pro_efficient - Copy (master)
$ git commit -m "add files"
[master (root-commit) d7eda69] add files
  5 files changed, 267 insertions(+)
  create mode 100644 New folder (2)/image_ar-
ay.py
  create mode 100644 New folder (2)/image_clu-
ster.py
  create mode 100644 New folder (2)/make_roi.
py
  create mode 100644 New folder/all_module.py
  create mode 100644 New folder/gui.py

WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
photos project/pro_efficient - Copy (master)
$ git branch -M main
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
photos project/pro_efficient - Copy (main)
$
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
photos project/pro_efficient - Copy (master)
$ git commit -m "add files"
[master (root-commit) d7eda69] add files
  5 files changed, 267 insertions(+)
  create mode 100644 New folder (2)/image_array.py
  create mode 100644 New folder (2)/image_cluster.py
  create mode 100644 New folder (2)/make_roi.py
  create mode 100644 New folder/all_module.py
  create mode 100644 New folder/gui.py

WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
photos project/pro_efficient - Copy (master)
$ git branch -M main

WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
photos project/pro_efficient - Copy (main)
$ git remote add origin |
```



```
$ git commit -m "add files"
[master (root-commit) d7eda69] add files
 5 files changed, 267 insertions(+)
 create mode 100644 New folder (2)/image_array.py
 create mode 100644 New folder (2)/image_cluster.py
 create mode 100644 New folder (2)/make_roi.py
 create mode 100644 New folder/all_module.py
 create mode 100644 New folder/gui.py
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
photos project/pro_efficient - Copy (master)
```

```
$ git branch -M main
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
photos project/pro_efficient - Copy (main)
$ git remote add origin https://github.com/w
scubegaurav/test_wscube.git
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google
photos project/pro_efficient - Copy (main)
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google photos project/pro_efficient - Copy  
(main)
```

```
$ git commit -m "add files"
```

```
On branch main
```

```
nothing to commit, working tree clean
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google photos project/pro_efficient - Copy  
(main)
```

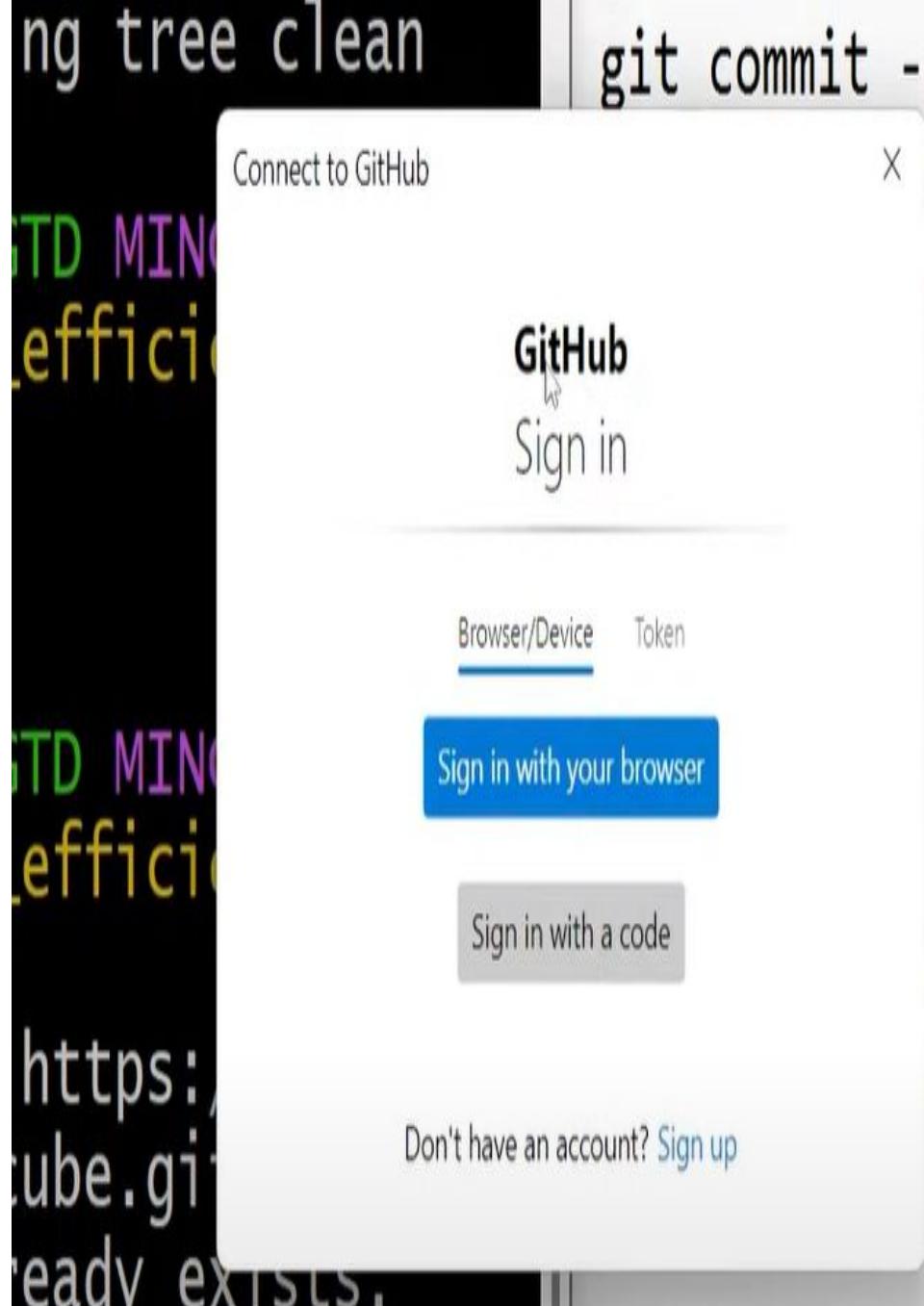
```
$ git branch -M main
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google photos project/pro_efficient - Copy  
(main)
```

```
$ git remote add origin https://github.com/wscubegaurav/test_wscube.git  
error: remote origin already exists.
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google photos project/pro_efficient - Copy  
(main)
```

```
$ git push -u origin main
```



ng tree clean

git commit -

Connect to GitHub



 GitHub
Sign in

Browser/Device Token

[Sign in with your browser](#)

[Sign in with a code](#)

Don't have an account? [Sign up](#)

```
ogle photos project/pro_efficient - Copy  
 (main)  
$ git push -u origin main  
To https://github.com/wscubegaurav/test_  
wscube.git  
 ! [rejected]           main -> main (fetch  
 first)  
error: failed to push some refs to 'http  
s://github.com/wscubegaurav/test_wscube.  
git'  
hint: Updates were rejected because the  
remote contains work that you do not  
hint: have locally. This is usually caus  
ed by another repository pushing to  
hint: the same ref. If you want to integ  
rate the remote changes, use  
hint: 'git pull' before pushing again.  
hint: See the 'Note about fast-forwards'  
in 'git push --help' for details.
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/go  
gle photos project/pro_efficient - Copy  
 (main)  
$
```

```
ogle photos project/pro_efficient - Copy  
(main)  
$ git push -u origin main  
To https://github.com/wscubegaurav/test_wscube.git  
! [rejected]           main -> main (fetch  
first)  
error: failed to push some refs to 'http  
s://github.com/wscubegaurav/test_wscube.  
git'  
hint: Updates were rejected because the  
remote contains work that you do not  
hint: have locally. This is usually caus  
ed by another repository pushing to  
hint: the same ref. If you want to integ  
rate the remote changes, use  
hint: 'git pull' before pushing again.  
hint: See the 'Note about fast-forwards'  
in 'git push --help' for details.
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/go  
gle photos project/pro_efficient - Copy  
(main)  
$ git checkout -b my-new-branch
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/go  
gle photos project/pro_efficient - Copy  
(main)  
$ git checkout -b my-new-branch  
Switched to a new branch 'my-new-branch'
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google photos project/pro_efficient - Copy  
                                (my-new-branch)  
$ git add .
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google photos project/pro_efficient - Copy  
                                (my-new-branch)  
$ git commit -m "New branch"  
On branch my-new-branch  
nothing to commit, working tree clean
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/google photos project/pro_efficient - Copy  
                                (my-new-branch)  
$
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/go
ogle photos project/pro_efficient - Copy
(main)
```

```
$ git checkout -b my-new-branch
Switched to a new branch 'my-new-branch'
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/go
ogle photos project/pro_efficient - Copy
(my-new-branch)
```

```
$ git add .
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/go
ogle photos project/pro_efficient - Copy
(my-new-branch)
```

```
$ git commit -m "New branch"
On branch my-new-branch
nothing to commit, working tree clean
```

```
WSCUBETECH@LAPTOP-7KCT3GTD MINGW64 /d/go
ogle photos project/pro_efficient - Copy
(my-new-branch)
```

```
$ git push -u origin my-new-branch
```

```
ogle photos project/pro_efficient - Copy  
(my-new-branch)  
$ git push -u origin my-new-branch  
Enumerating objects: 9, done.  
Counting objects: 100% (9/9), done.  
Delta compression using up to 8 threads  
Compressing objects: 100% (9/9), done.  
Writing objects: 100% (9/9), 4.08 KiB |  
1.02 MiB/s, done.  
Total 9 (delta 0), reused 0 (delta 0), pack-reused 0  
remote:  
remote: Create a pull request for 'my-new-branch' on GitHub by visiting:  
remote: https://github.com/wscubegaurav/test_wscube/pull/new/my-new-branch  
remote:  
To https://github.com/wscubegaurav/test_wscube.git  
 * [new branch] my-new-branch -> my-new-branch  
branch 'my-new-branch' set up to track '  
origin/my-new-branch'.
```



test_wscube

Public

Pin

Unwatch 1

my-new-branch had recent pushes less than a minute ago

Compare & pull request

main ▾

1 branch

0 tags

Go to file

Add file ▾

Code ▾



wscubegaurav Initial commit

651c1f8 31 minutes ago 1 commit



README.md

Initial commit

31 minutes ago

README.md



test_wscube

**test_wscube**

Public

Pin

Unwatch 1

⌚ my-new-branch had recent pushes 1 minute ago

Compare & pull request

⌚ main ▾

⌚ 2 branches

🏷 0 tags

Go to file

Add file ▾

🔗 Code ▾

Switch branches/tags X

Find or create a branch...

Branches

Tags

✓ main

default

my-new-branch

[View all branches](#)

etion, or require status checks before merging. Learn more

Protect this branch X

651c1f8 32 minutes ago ⏲ 1 commit

Initial commit

32 minutes ago

README.md edit

test_wscube

**test_wscube**

Public

[Pin](#)[Unwatch 1](#)

my-new-branch had recent pushes 1 minute ago

[Compare & pull request](#)

my-new-branch ▾

2 branches

0 tags

[Go to file](#)[Add file ▾](#)[Code ▾](#)

This branch is 1 commit ahead, 1 commit behind main.

[Contribute ▾](#)**gauravprajapat29** add files

d7eda69 18 minutes ago 1 commit



New folder (2)

add files

18 minutes ago



New folder

add files

18 minutes ago

Help people interested in this repository understand your project by adding a README.

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