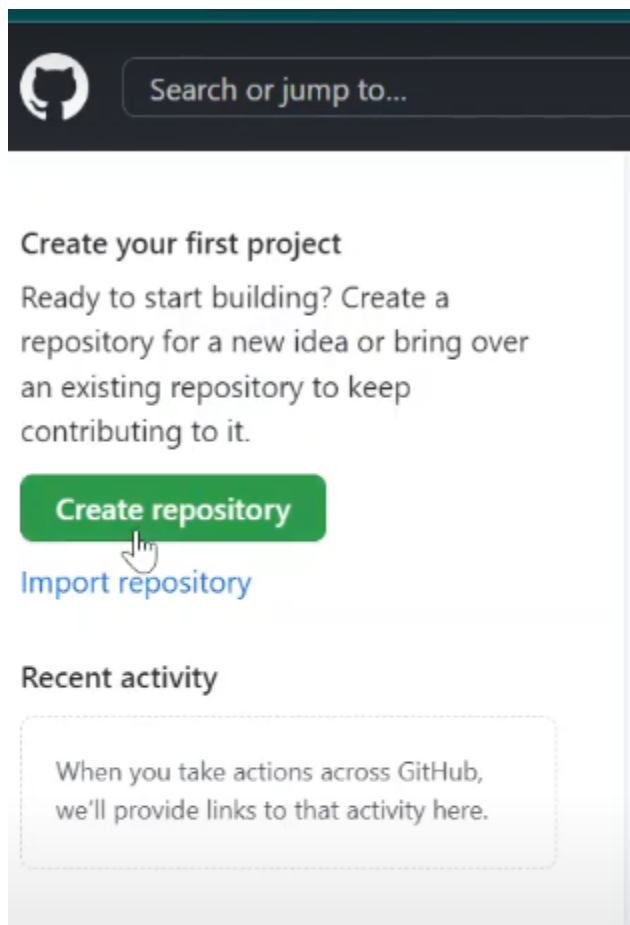Step 1: register into github to push all our code into it:

1. Navigate to https://github.com/.
2. Click Sign up by entering email address, password, and username
3. Now we will get the verification link to our mentioned email address, verify it

Step 2: creating the new repository in github account by clicking create repository as follows:

1. Enter new repository name(bash_project)
2. Select the repository should be public or private
3. Select add a README file if you need
4. Click create repository

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? Import a repository.

Owner *

Repository name *

[affordablewebapp ▾] / [|]

Great repository names are short and memorable. Need inspiration? How about **didactic-journey**?

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:

Skip this step if you're importing an existing repository.

☐ **Add a README file**
This is where you can write a long description for your project. Learn more.

Add .gitignore

Choose which files not to track from a list of templates. Learn more.

[.gitignore template: **None** ▾]

Choose a license

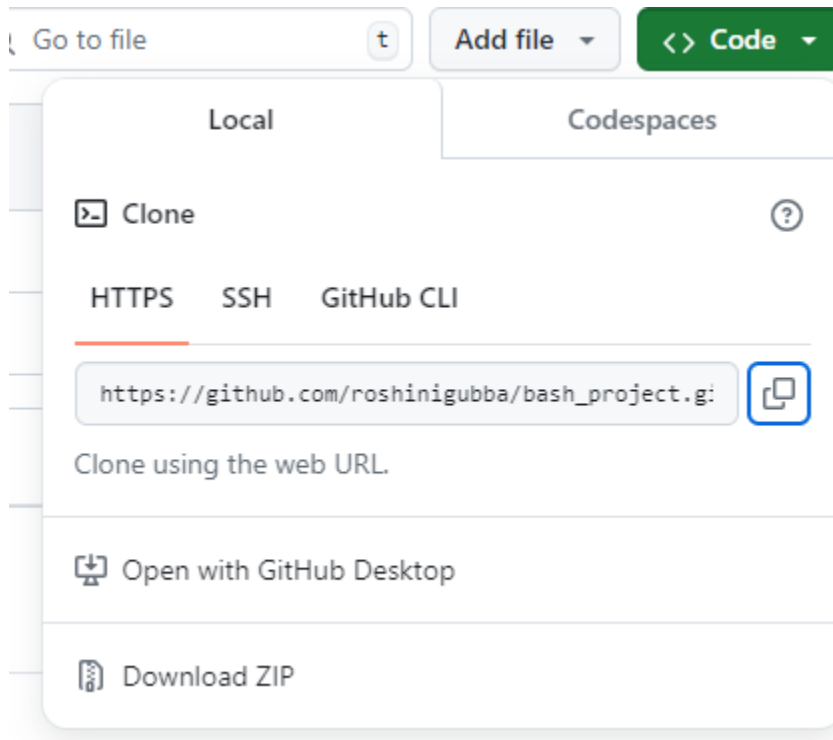A license tells others what they can and can't do with your code. Learn more.

[License: **None** ▾]

ⓘ You are creating a public repository in your personal account.

[**Create repository**]

Step 3: cloning the git repository:

1. Copy the repository https link from github and paste it in the git bash:

2. Copy that https link as following in git bash for cloning:

3. We will clone that repository into our git bash to update the repository from our computer by pushing code, files, creating branches through git bash

Step 4: we will list all the directories, to find our git repository in our local computer:

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~ (master)
$ ls
'3D Objects'/
 AppData/
'Application Data'@
 Contacts/
 Cookies@
 Desktop/
 DevOps/
 Documents/
 Downloads/
 Favorites/
 IntelGraphicsProfiles/
 Links/
 Linux-_project/
'Local Settings'@
 Music/
'My Documents'@
 NTUSER.DAT
 NTUSER.DAT{53b39e88-18c4-11ea-a811-000d3aa4692b}.TM.blf
 NTUSER.DAT{53b39e88-18c4-11ea-a811-000d3aa4692b}.TMContainer0000000000000000000
1.regtrans-ms
 NTUSER.DAT{53b39e88-18c4-11ea-a811-000d3aa4692b}.TMContainer0000000000000000000
2.regtrans-ms
 NetHood@
 OneDrive/
 Pictures/
 PrintHood@
 Recent@
'Saved Games'/
 Searches/
 SendTo@
'Start Menu'@
 Templates@
 Videos/
'VirtualBox VMs'/
'WPS Cloud Files'/
 bash_project/
 dataresource1.tf
 graph.svg
 linux_project2/
```

Step 5: we will change directory to bash_project directory to add or update the files or code, or creating directories:

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~ (master)
$ cd bash_project/
```

Step 6: creating a directory name as scripts to push all the scripts into it:

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ mkdir scripts
```

Step 7: Go to scripts directory and create the collector file as file1:

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project/scripts (main)
$ touch file1
```

Step 8: initialize git by using git init:

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git init
Reinitialized existing Git repository in C:/Users/roshini.gubba/bash_project/.gi
t/
```

Step 9: After that we should add that directory into git by using **git add filename :**

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git add .
```

add . : to add/update all the files at the time.

Step 10 : After adding file, we get staged file, now we have to commit the staged file:

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git commit -m "1st commit"
[main 61f9a06] 1st commit
 1 file changed, 1 deletion(-)
 delete mode 160000 scripts
```

Step 11: push that committed file/directory into git:

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git push origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (1/1), done.
Writing objects: 100% (2/2), 245 bytes | 122.00 KiB/s, done.
Total 2 (delta 0), reused 1 (delta 0), pack-reused 0
To https://github.com/roshinigubba/bash_project.git
   793fe24..61f9a06  main -> main
```

After creating the scripts directory, creating the file inside that directory and pushing into git , it gets updated in git as follows:
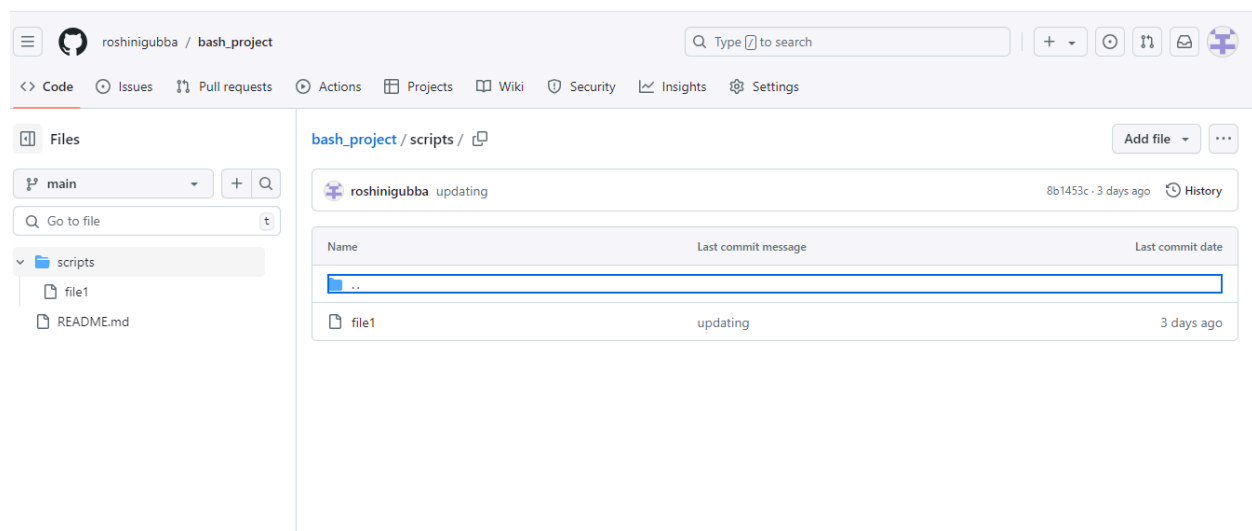
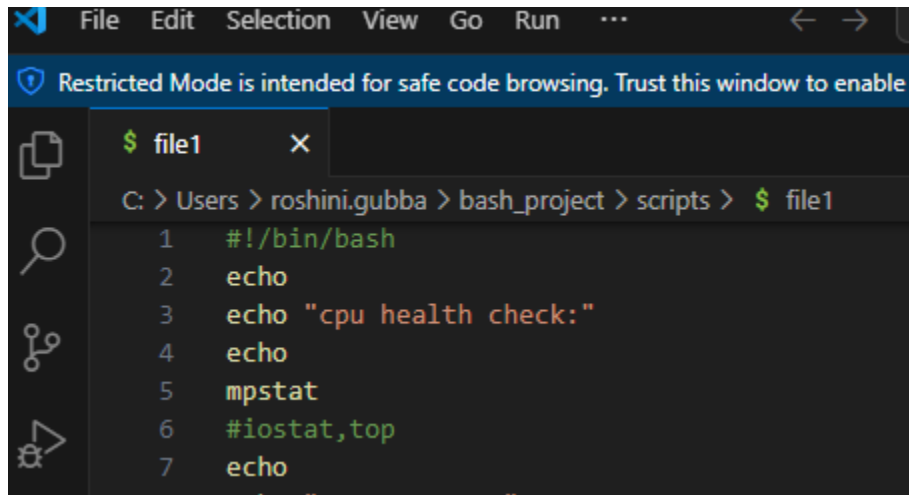Step 12: open the file in vs code or any editor, write the script and save it, and do the following steps again after writing and saving the script:

1. git init
2. git add filename (or) git add .
3. Git commit -m "message of the file what we have updated"
4. git push origin main

Find the location of bash_project directory in our computer and edit that file or write the script in that file by going into that location of the file:

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ pwd
/c/Users/roshini.gubba/bash_project
```

File Edit Selection View Go Run ...   ← →

🛡 Restricted Mode is intended for safe code browsing. Trust this window to enable

$ file1   ✕

C: > Users > roshini.gubba > bash_project > scripts > $ file1

```bash
1     #!/bin/bash
2     echo
3     echo "cpu health check:"
4     echo
5     mpstat
6     #iostat,top
7     echo
```

Save the file after writing the script, then follow the steps like, init, add, commit, push

MINGW64:/c/Users/roshini.gubba/bash_project

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git add .

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git commit -m "adding cpu health check"
[main a6c5f89] adding cpu health check
 1 file changed, 7 insertions(+)

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 404 bytes | 67.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/roshinigubba/bash_project.git
   4b29a0e..a6c5f89  main -> main
```

```
echo "memory usage"
free -h
echo
echo "disk usage"
echo
df -h
echo
```

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git add .

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git commit -m "adding memory and disk usage"
[main 54a8994] adding memory and disk usage
 1 file changed, 7 insertions(+)

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 438 bytes | 109.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/roshinigubba/bash_project.git
   a6c5f89..54a8994  main -> main
```

```
echo
echo "network interface status and their throughput"
ifconfig
#ip -s link
echo
echo " running process"
ps aux
# ps aux | awk '$8=="R"{print$0}'
echo
```

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git add .

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git commit -m "adding network interface status"
[main 7e0b66f] adding network interface status
 1 file changed, 4 insertions(+)

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 451 bytes | 150.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/roshinigubba/bash_project.git
   54a8994..7e0b66f  main -> main

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git add .

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git commit -m "adding running process"
[main e01f530] adding running process
 1 file changed, 4 insertions(+)

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 478 bytes | 95.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/roshinigubba/bash_project.git
   7e0b66f..e01f530  main -> main
```

```
22    echo
23    echo "system uptime"
24    uptime
25    echo
26    echo "critical errors in system logs"
27    journalctl -p 3  -xb
28    echo
29
```

MINGW64:/c/Users/roshini.gubba/bash_project

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git add .

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git commit -m "adding uptime"
[main 107bea5] adding uptime
 1 file changed, 3 insertions(+)

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 389 bytes | 97.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/roshinigubba/bash_project.git
   e01f530..107bea5  main -> main

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git add .

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git commit -m "adding critical errors"
[main 172f55c] adding critical errors
 1 file changed, 3 insertions(+)

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 487 bytes | 162.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/roshinigubba/bash_project.git
   107bea5..172f55c  main -> main
```

Step by step it is updated in git after pushing that code into the git repository as follows:

Files

main

Go to file

- scripts
  - file1
  - README.md

```
Code    Blame    28 lines (28 loc) · 384 Bytes

 1    #!/bin/bash
 2    echo
 3    echo "cpu health check:"
 4    echo
 5    mpstat
 6    #iostat,top
 7    echo
 8    echo "memory usage"
 9    free -h
10    echo
11    echo "disk usage"
12    echo
13    df -h
14    echo
15    echo "network interface status and their throughput"
16    ifconfig
17    #ip -s link
18    echo
19    echo " running process"
20    ps aux
21    # ps aux | awk '$8=="R"{print$0}'
22    echo
23    echo "system uptime"
24    uptime
25    echo
26    echo "critical errors in system logs"
27    journalctl -p 3  -xb
```

It also list all the commits whatever we have done:

Commits

main   All users   All time

○── Commits on Aug 9, 2024

updating
roshinigubba committed 3 days ago   8b1453c

adding critical errors
roshinigubba committed 3 days ago   172f55c

adding uptime
roshinigubba committed 3 days ago   107bea5

adding running process
roshinigubba committed 3 days ago   e01f530

adding network interface status
roshinigubba committed 3 days ago   7e0b66f

adding memory and disk usage
roshinigubba committed 3 days ago   54a8994

adding cpu health check
roshinigubba committed 3 days ago   a6c5f89

Creating the doc directory to push all the documents that contains all the steps performed in the project:

```
MINGW64:/c/Users/roshini.gubba/bash_project
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ mkdir docs

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
```

Creating the file named collector_doc file inside the docs directory

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ cd docs

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project/docs (main)
$ touch collector_doc

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project/docs (main)
$ cd ..
```

Performing four steps, init, add, commit, push, to push the directory into the git:

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git init
Reinitialized existing Git repository in C:/Users/roshini.gubba/bash_project/.gi
t/

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git add .

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git commit -m "adding doc dir and file into it"
[main bbfb35f] adding doc dir and file into it
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 docs/collector_doc

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 383 bytes | 95.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/roshinigubba/bash_project.git
   a3ee40c..bbfb35f  main -> main
```

Editing the collector_file and write all steps we have done to complete this task and pushing that file into the git:

```
Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ cd docs/

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project/docs (main)
$ ls
collector_doc

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project/docs (main)
$ cat collector_doc

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project/docs (main)
$ cp /c/Users/roshini.gubba/Downloads/collector_doc.pdf /c/Users/roshini.gubba/b
ash_project/docs

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project/docs (main)
$ cd ..

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git init
Reinitialized existing Git repository in C:/Users/roshini.gubba/bash_project/.gi
t/

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git add .

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git commit -m " adding folder and adding file into it"
[main b6ff23e]  adding folder and adding file into it
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 docs/collector_doc.pdf

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ git push origin main
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 564.59 KiB | 5.18 MiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/roshinigubba/bash_project.git
   bbfb35f..b6ff23e  main -> main

Roshini.Gubba@ATMECSINLT-706 MINGW64 ~/bash_project (main)
$ |
```