

## Run a factorial program using git commands

```
MINGW64:/c/Users/Varnika Mulay/Downloads/coursera

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~ (main)
$ cd "C:/Users/Varnika Mulay/Downloads"

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads (master)
$ python factorial_program.py
Enter number: 7
Factorial of 7 is: 5040

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads (master)
$ python factorial_program.py
Enter number: -1
Negative number!

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads (master)
$ python factorial_program.py
Enter number: 0
Factorial of 0 is 1
```

## Access and update GitHub repo using git commands

```
MINGW64:/c/Users/Varnika Mulay/Downloads/coursera

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads (master)
$ git init
Reinitialized existing Git repository in C:/Users/Varnika Mulay/Downloads/.git/

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads (master)
$ git clone https://github.com/Varnika-M-2004/coursera
Cloning into 'coursera'...
remote: Invalid username or password.
fatal: Authentication failed for 'https://github.com/Varnika-M-2004/coursera/'

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads (master)
$ git clone "https://github.com/Varnika-M-2004/coursera"
Cloning into 'coursera'...
remote: Enumerating objects: 14, done.
remote: Counting objects: 100% (14/14), done.
remote: Compressing objects: 100% (10/10), done.
remote: Total 14 (delta 1), reused 8 (delta 0), pack-reused 0
Receiving objects: 100% (14/14), done.
Resolving deltas: 100% (1/1), done.
```

 MINGW64:/c/Users/Varnika Mulay/Downloads/coursera

```
Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads (master)
$ cd coursera

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ git add example.py

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ git commit -m "Add example.py file"
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ nano example.py

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   example.py

no changes added to commit (use "git add" and/or "git commit -a")

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ git add example.py

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ git commit -m "Update example.py file"
[main a9441ca] Update example.py file
1 file changed, 1 insertion(+)
```

 MINGW64:/c/Users/Varnika Mulay/Downloads/coursera

```
Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 396 bytes | 396.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/Varnika-M-2004/coursera
   bba5806..a9441ca  main -> main

Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ git remote -v
origin  https://github.com/Varnika-M-2004/coursera (fetch)
origin  https://github.com/Varnika-M-2004/coursera (push)
```

MINGW64:/c/Users/Varnika Mulay/Downloads/coursera

```
Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ git log
commit a9441ca2573b40ff935060e36972f100aeb0c779 (HEAD -> main, origin/main, origin/HEAD)
Author: Varnika-M-2004 <88385934+Varnika-M-2004@users.noreply.github.com>
Date: Tue Jul 2 20:02:12 2024 +0530

    Update example.py file

commit bba58065a484b84e14592d5fefbc073df3964164
Merge: 5c58348 5cf6d4d
Author: Varnika Mulay <varni.mulay@gmail.com>
Date: Thu Aug 5 05:11:16 2021 +0000

    Merge branch 'main' of https://github.com/Varnika-M-2004/coursera into main

commit 5cf6d4db42d4350ccc595228646680dc9f508600
Author: Varnika-M-2004 <88385934+Varnika-M-2004@users.noreply.github.com>
Date: Thu Aug 5 10:40:07 2021 +0530

    My first commit.

commit 5c58348dcf65c53a05a9874463fb283e9cccaf29
Author: Varnika Mulay <varni.mulay@gmail.com>
Date: Thu Aug 5 05:07:46 2021 +0000

    I have added a few more lines.

...skipping...
commit a9441ca2573b40ff935060e36972f100aeb0c779 (HEAD -> main, origin/main, origin/HEAD)
Author: Varnika-M-2004 <88385934+Varnika-M-2004@users.noreply.github.com>
Date: Tue Jul 2 20:02:12 2024 +0530

    Update example.py file

commit bba58065a484b84e14592d5fefbc073df3964164
Merge: 5c58348 5cf6d4d
Author: Varnika Mulay <varni.mulay@gmail.com>
Date: Thu Aug 5 05:11:16 2021 +0000

    Merge branch 'main' of https://github.com/Varnika-M-2004/coursera into main
```

```
commit 5cf6d4db42d4350ccc595228646680dc9f508600
Author: Varnika-M-2004 <88385934+Varnika-M-2004@users.noreply.github.com>
Date: Thu Aug 5 10:40:07 2021 +0530

    My first commit.

commit 5c58348dcf65c53a05a9874463fb283e9cccaf29
Author: Varnika Mulay <varni.mulay@gmail.com>
Date: Thu Aug 5 05:07:46 2021 +0000

    I have added a few more lines.

commit 708f43f0bf2899395df83575b6989f1f0dd76c58
Author: Varnika Mulay <varni.mulay@gmail.com>
Date: Thu Aug 5 05:05:20 2021 +0000

    I am editing the README file.

commit 74e5ab38540658a236021ca003c701857f0fead6
Author: Varnika-M-2004 <88385934+Varnika-M-2004@users.noreply.github.com>
Date: Thu Aug 5 10:30:00 2021 +0530

    Initial commit
```

```
Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ git pull
Already up to date.
```

```
Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ git branch
* main
```

```
Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ git diff
```

```
Varnika Mulay@LAPTOP-S6R999J0 MINGW64 ~/Downloads/coursera (main)
$ |
```