

```
rutuja@ubuntu-virtualbox:~$ git --version
git version 2.43.0
rutuja@ubuntu-virtualbox:~$ git config --global user.name
Rutuja Mulik
rutuja@ubuntu-virtualbox:~$ git config --global user.mail
rutuja@ubuntu-virtualbox:~$ git config --global user.email
rutujamulik53@gmail.com
rutuja@ubuntu-virtualbox:~$
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```
rutuja@ubuntu-virtualbox:~$ mkdir git-task-2
rutuja@ubuntu-virtualbox:~$ cd git-task-2
rutuja@ubuntu-virtualbox:~/git-task-2$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/rutuja/git-task-2/.git/
rutuja@ubuntu-virtualbox:~/git-task-2$ ls -a
.  ..  .git
rutuja@ubuntu-virtualbox:~/git-task-2$
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```
rutuja@ubuntu-virtualbox:~/git-task-2$ ls -a
. .. .git
rutuja@ubuntu-virtualbox:~/git-task-2$ nano README.md
rutuja@ubuntu-virtualbox:~/git-task-2$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    README.md

nothing added to commit but untracked files present (use "git add" to track)
rutuja@ubuntu-virtualbox:~/git-task-2$
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```
rutuja@ubuntu-virtualbox:~/git-task-2$ git add README.md
rutuja@ubuntu-virtualbox:~/git-task-2$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   README.md

rutuja@ubuntu-virtualbox:~/git-task-2$
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```
rutuja@ubuntu-virtualbox:~/git-task-2$ git commit -m "Initial commit - added README"
[master (root-commit) c2e5e3f] Initial commit - added README
 1 file changed, 2 insertions(+)
 create mode 100644 README.md
rutuja@ubuntu-virtualbox:~/git-task-2$
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```
rutuja@ubuntu-virtualbox:~/git-task-2$ git commit -m "Initial commit - added README"
[master (root-commit) c2e5e3f] Initial commit - added README
 1 file changed, 2 insertions(+)
 create mode 100644 README.md
rutuja@ubuntu-virtualbox:~/git-task-2$ git remote add origin https://github.com/Rutu-git/git--task-2.git
rutuja@ubuntu-virtualbox:~/git-task-2$ git remote -v
origin  https://github.com/Rutu-git/git--task-2.git (fetch)
origin  https://github.com/Rutu-git/git--task-2.git (push)
rutuja@ubuntu-virtualbox:~/git-task-2$
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```
rutuja@ubuntu-virtualbox:~/git-task-2$ ls ~/.ssh
authorized_keys
rutuja@ubuntu-virtualbox:~/git-task-2$ ls ~/.ssh/id_ed25519.pub
ls: cannot access '/home/rutuja/.ssh/id_ed25519.pub': No such file or directory
rutuja@ubuntu-virtualbox:~/git-task-2$ ssh-keygen -t ed25519 -C "rutujamulik53@gmail.com"
Generating public/private ed25519 key pair.
Enter file in which to save the key (/home/rutuja/.ssh/id_ed25519):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/rutuja/.ssh/id_ed25519
Your public key has been saved in /home/rutuja/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:Dnj17HvZi3gjTqY1Xt5zLah4xIjkfVjyKsrB/EWQvm0 rutujamulik53@gmail.com
The key's randomart image is:
+--[ED25519 256]--+
|          |
|          |
|       .  |
|     o .  |
|   o.o.o. |
| .o+oSBo  |
| o .o*+=  |
| + .. E+* .+ .|
| . o.o.Bo**o+ o|
| o...oo*=o.o= |
+---[SHA256]---+
rutuja@ubuntu-virtualbox:~/git-task-2$ eval "$(ssh-agent -s)"
Agent pid 6270
rutuja@ubuntu-virtualbox:~/git-task-2$ ssh-add ~/.ssh/id_ed25519
Identity added: /home/rutuja/.ssh/id_ed25519 (rutujamulik53@gmail.com)
rutuja@ubuntu-virtualbox:~/git-task-2$ cat ~/.ssh/id_ed25519.pub
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAIKIC1Bx7CSNTQaocrxHzr9Ht/FzDkNt9iz0fJtWbDHf8 rutujamulik53@gmail.com
rutuja@ubuntu-virtualbox:~/git-task-2$ █
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rutuja@ubuntu-virtualbox:~/git-task-2$ ls ~/.ssh
authorized_keys
rutuja@ubuntu-virtualbox:~/git-task-2$ ls ~/.ssh/id_ed25519.pub
ls: cannot access '/home/rutuja/.ssh/id_ed25519.pub': No such file or directory
rutuja@ubuntu-virtualbox:~/git-task-2$ ssh-keygen -t ed25519 -C "rutujamulik53@gmail.com"
Generating public/private ed25519 key pair.
Enter file in which to save the key (/home/rutuja/.ssh/id_ed25519):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/rutuja/.ssh/id_ed25519
Your public key has been saved in /home/rutuja/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:Dnj17HvZi3gjTqY1Xt5zLah4xIjkfVjyKsrB/EWQvm0 rutujamulik53@gmail.com
The key's randomart image is:
++-[ED25519 256]---+
| |
| . |
| o . |
| o.o.o. |
| .o+oSBo |
| o .o*+= |
| + . E+* .+ .|
| . o.o.Bo**o+ o|
| o...oo*=o.o= |
+----[SHA256]-----+
rutuja@ubuntu-virtualbox:~/git-task-2$ eval "$(ssh-agent -s)"
Agent pid 6270
rutuja@ubuntu-virtualbox:~/git-task-2$ ssh-add ~/.ssh/id_ed25519
Identity added: /home/rutuja/.ssh/id_ed25519 (rutujamulik53@gmail.com)
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ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAIKIC1Bx7CSNTQaocrxHzr9Ht/FzDkNt9iz0fJtWbDHf8 rutujamulik53@gmail.com
rutuja@ubuntu-virtualbox:~/git-task-2$ git remote -v
origin https://github.com/Rutu-git/git--task-2.git (fetch)
origin https://github.com/Rutu-git/git--task-2.git (push)
rutuja@ubuntu-virtualbox:~/git-task-2$ git remote set-url origin git@github.com:Rutu-git/git-task-2.git
rutuja@ubuntu-virtualbox:~/git-task-2$ git remote set-url origin git@github.com:Rutu-git/git--task-2.git
rutuja@ubuntu-virtualbox:~/git-task-2$ ssh -T git@github.com
The authenticity of host 'github.com (20.207.73.82)' can't be established.
ED25519 key fingerprint is SHA256:+DiY3wvvV6TuJJhbpZisF/zLDA0zPMSvHdkr4UvCoqu.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'github.com' (ED25519) to the list of known hosts.
Hi Rutu-git! You've successfully authenticated, but GitHub does not provide shell access.
rutuja@ubuntu-virtualbox:~/git-task-2$ git push -u origin main

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rutuja@ubuntu-virtualbox:~/git-task-2$ ssh -T git@github.com
The authenticity of host 'github.com (20.207.73.82)' can't be established.
ED25519 key fingerprint is SHA256:+DiY3wvvV6TuJJhbpZisF/zLDA0zPMSvHdkr4UvCoqu.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'github.com' (ED25519) to the list of known hosts.
Hi Rutu-git! You've successfully authenticated, but GitHub does not provide shell access.
rutuja@ubuntu-virtualbox:~/git-task-2$ git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 2 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 283 bytes | 56.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:Rutu-git/git--task-2.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
rutuja@ubuntu-virtualbox:~/git-task-2$ 

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branch 'main' set up to track origin/main .
rutuja@ubuntu-virtualbox:~/git-task-2$ git checkout -b feature-update
Switched to a new branch 'feature-update'
rutuja@ubuntu-virtualbox:~/git-task-2$ git branch
* feature-update
  main
rutuja@ubuntu-virtualbox:~/git-task-2$ 

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```
rutuja@ubuntu-virtualbox:~/git-task-2$ nano README.md
rutuja@ubuntu-virtualbox:~/git-task-2$ git add README.md
rutuja@ubuntu-virtualbox:~/git-task-2$ git commit -m "Updated README in feature branch"
[feature-update 91ca7a7] Updated README in feature branch
 1 file changed, 1 insertion(+)
rutuja@ubuntu-virtualbox:~/git-task-2$
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```
rutuja@ubuntu-virtualbox:~/git-task-2$ git add README.md
rutuja@ubuntu-virtualbox:~/git-task-2$ git commit -m "Updated README in feature branch"
[feature-update 91ca7a7] Updated README in feature branch
 1 file changed, 1 insertion(+)
rutuja@ubuntu-virtualbox:~/git-task-2$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
rutuja@ubuntu-virtualbox:~/git-task-2$ git merge feature-update
Updating c2e5e3f..91ca7a7
Fast-forward
 README.md | 1 +
 1 file changed, 1 insertion(+)
rutuja@ubuntu-virtualbox:~/git-task-2$
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+ 1 file changed, 1 insertion(+)
rutuja@ubuntu-virtualbox:~/git-task-2$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 2 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 351 bytes | 175.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:Rutu-git/git--task-2.git
  c2e5e3f..91ca7a7  main -> main
rutuja@ubuntu-virtualbox:~/git-task-2$
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```
lutu@ubuntu-virtualbox:~/git-task-2$ git log --oneline
91ca7a7 (HEAD -> main, origin/main, feature-update) Updated README in feature branch
c2e5e3f Initial commit - added README
rutuja@ubuntu-virtualbox:~/git-task-2$
```

```
lutu@ubuntu-virtualbox:~/git-task-2$ git log --oneline
91ca7a7 (HEAD -> main, origin/main, feature-update) Updated README in feature branch
c2e5e3f Initial commit - added README
rutuja@ubuntu-virtualbox:~/git-task-2$ git reset --soft HEAD~1
rutuja@ubuntu-virtualbox:~/git-task-2$ git status
On branch main
Your branch is behind 'origin/main' by 1 commit, and can be fast-forwarded.
  (use "git pull" to update your local branch)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:   README.md

rutuja@ubuntu-virtualbox:~/git-task-2$ git reset --hard origin/main
HEAD is now at 91ca7a7 Updated README in feature branch
rutuja@ubuntu-virtualbox:~/git-task-2$
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