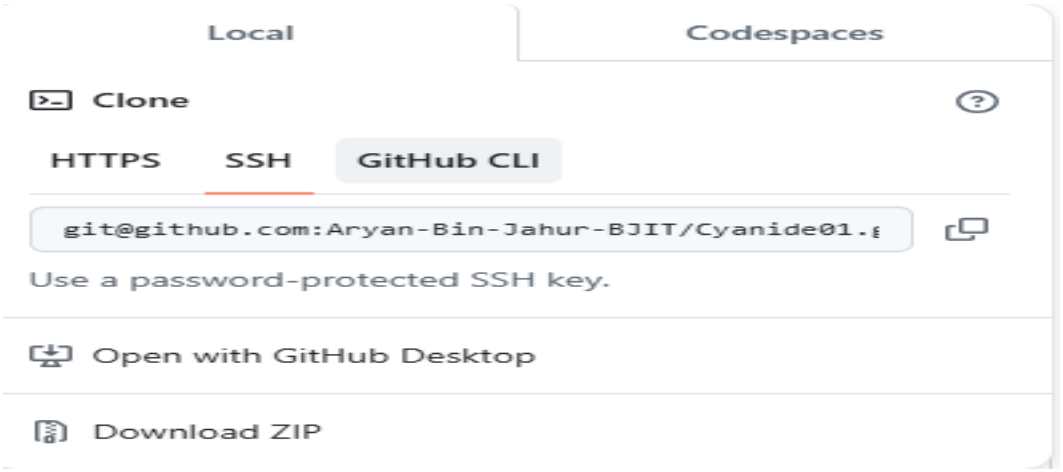
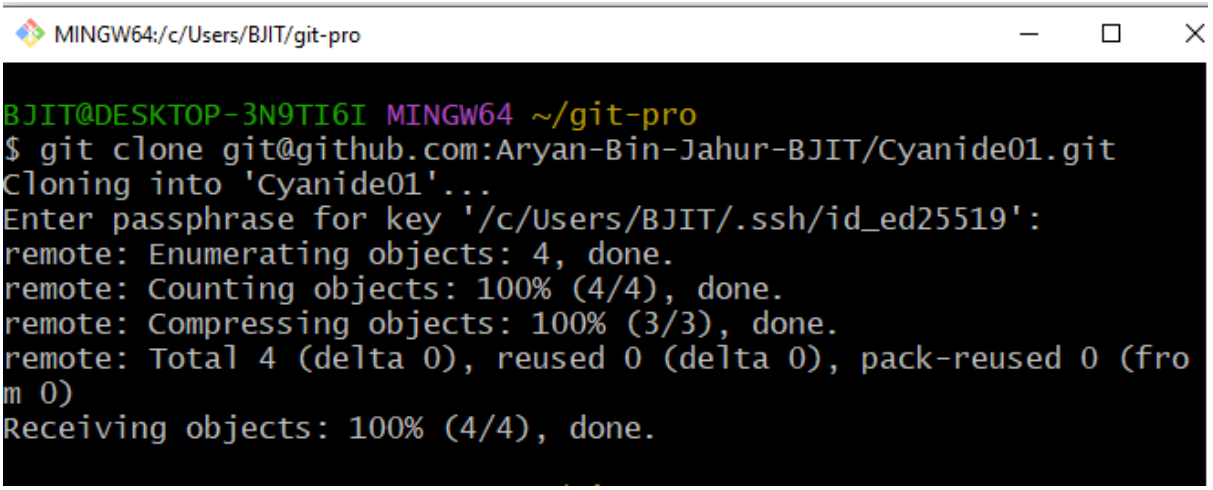
Git and GitHub Practical Exam

Copy the SSH link



Clone the Repository



Navigate the Directory

```
BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro
$ cd Cyanide01/

BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (development)
$ ls
LICENSE  README.md
```

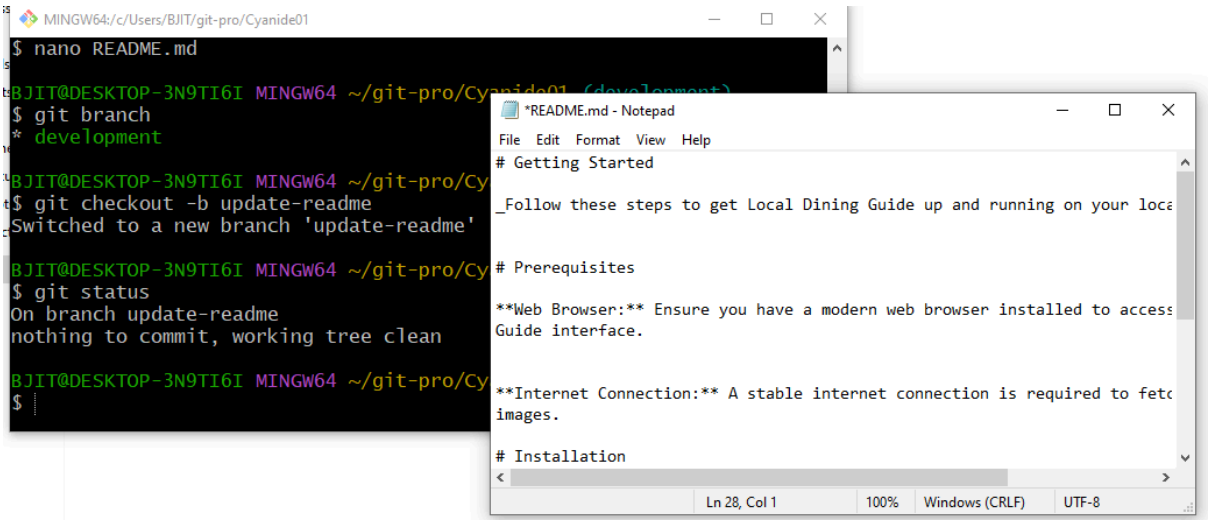
To see local branches

```
BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (development)
$ git branch
* development
```

Create a new Branch and checkout

```
BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (development)
$ git checkout -b update-readme
Switched to a new branch 'update-readme'
```

Add content to README file



Check status of local repository

```
BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (update-readme)
$ git status
On branch update-readme
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:   README.md

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

To stage the README file

```
BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (update-readme)
$ git add README.md
```

Commit the changes

```
BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (update-readme)
$ git commit -m "docs: update README with project installation instruction
This update includes details steps for cloning the repository
navigating directory and launching the applications."
```

Edit last commit message

```
BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (update-readme)
$ git commit --amend -m "docs: update README file
>
> This update includes details steps for cloning the repo
> and navigating dir and launching the app.
>
> Refs: #12"
[update-readme b7250b6] docs: update README file
 Date: Mon Nov 25 14:06:04 2024 +0600
 1 file changed, 27 insertions(+), 2 deletions(-)
```

Pull for getting latest updates from remote

```
BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (task-3)
$ git checkout development
Switched to branch 'development'
Your branch is up to date with 'origin/development'.

BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (development)
$ git pull origin development
Enter passphrase for key '/c/Users/BJIT/.ssh/id_ed25519':
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 4 (delta 1), reused 2 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (4/4), 1.97 KiB | 202.00 KiB/s, done.
From github.com:Aryan-Bin-Jahur-BJIT/Cyanide01
 * branch            development -> FETCH_HEAD
   ad98e74..afdb96d  development -> origin/development
Updating ad98e74..afdb96d
Fast-forward
 README.md | 27 ++++++++++++++++++++++++++
 1 file changed, 27 insertions(+)
```

Copy commit hash

Create a new branch

Use cherry-pick to merge new-branch and specific commit

```
BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (update-readme)
$ git log --oneline
b7250b6 (HEAD -> update-readme) docs: update README file
9beeb8f (origin/main) Initial commit

BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (update-readme)
$ git checkout task-03
Switched to branch 'task-03'

BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (task-03)
$ git cherry-pick b7250b6 --no-edit
Auto-merging README.md
CONFLICT (content): Merge conflict in README.md
error: could not apply b7250b6... docs: update README file
hint: After resolving the conflicts, mark them with
hint: "git add/rm <pathspec>", then run
hint: "git cherry-pick --continue".
hint: You can instead skip this commit with "git cherry-pick --skip".
hint: To abort and get back to the state before "git cherry-pick",
hint: run "git cherry-pick --abort".
hint: Disable this message with "git config advice.mergeConflict false"
```

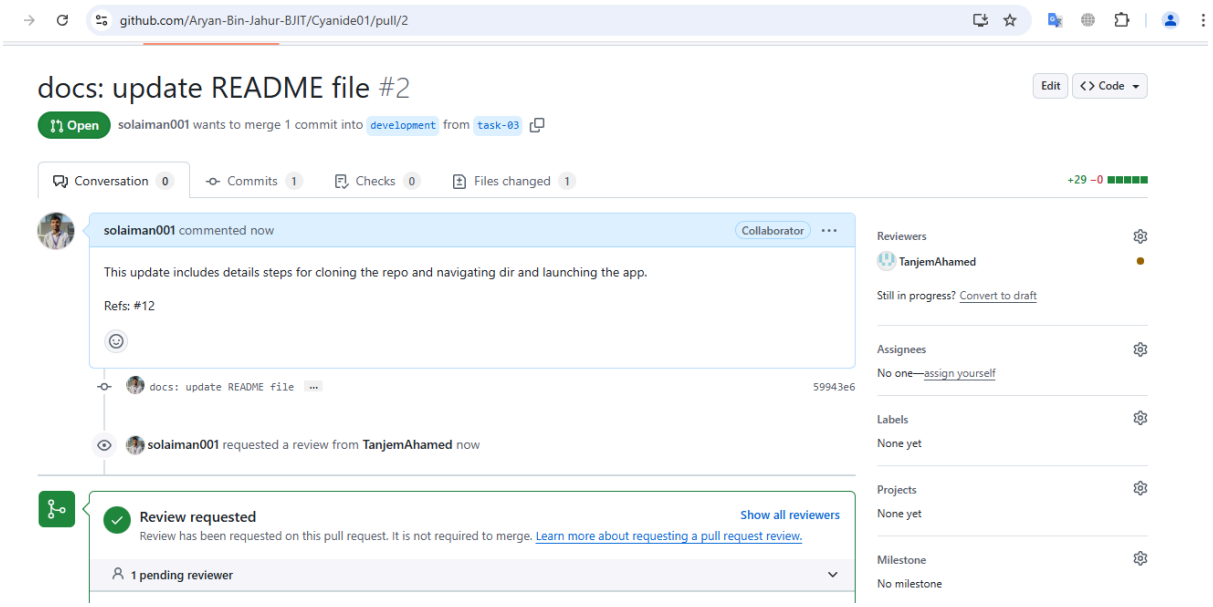
Resolve conflict and Add and continue cherry-pick

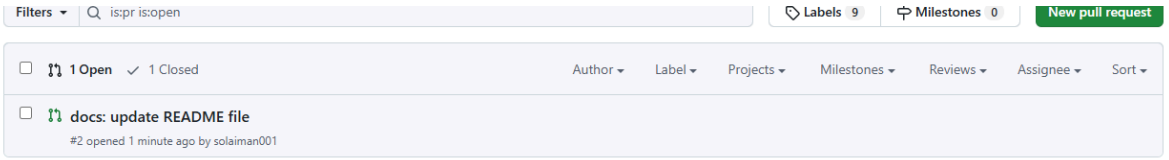
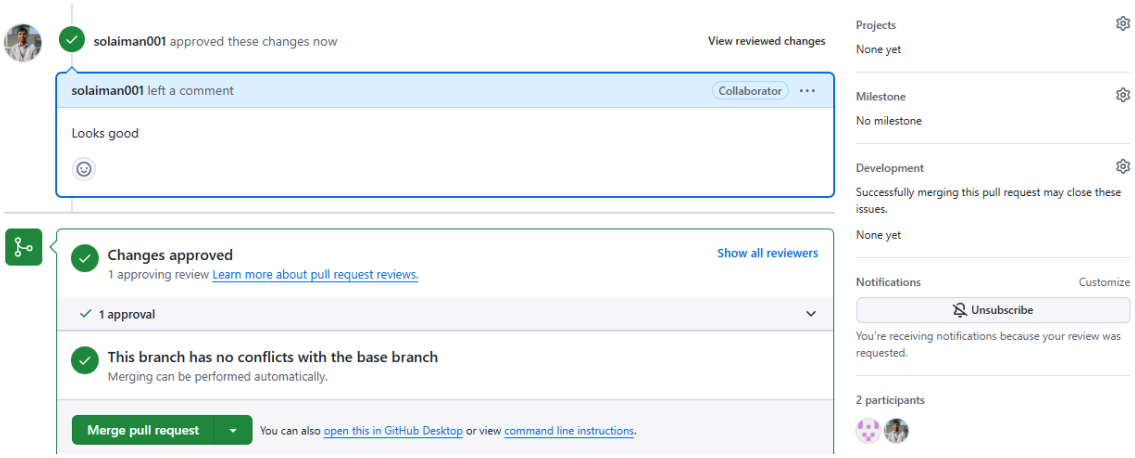
```
BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (task-03|CHERRY-PICKING)
$ git add .

BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (task-03|CHERRY-PICKING)
$ git cherry-pick --continue --no-edit
[task-03 59943e6] docs: update README file
 Date: Mon Nov 25 14:06:04 2024 +0600
 1 file changed, 29 insertions(+)
```

Push the Branch to Remote repository

```
BJIT@DESKTOP-3N9TI6I MINGW64 ~/git-pro/Cyanide01 (task-03)
$ git push -u origin task-03
Enter passphrase for key '/c/Users/BJIT/.ssh/id_ed25519':
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), 824 bytes | 824.00 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.
remote:
remote: Create a pull request for 'task-03' on GitHub by visiting:
remote:      https://github.com/Aryan-Bin-Jahur-BJIT/Cyanide01/pull/new/task-03
remote:
To github.com:Aryan-Bin-Jahur-BJIT/Cyanide01.git
 * [new branch]      task-03 -> task-03
branch 'task-03' set up to track 'origin/task-03'.
```

Pull request for merging with development branch





Review others pull request and approve