

TASK 1: Repository Setup

Goal: Initialize Git and create first commit

Steps:

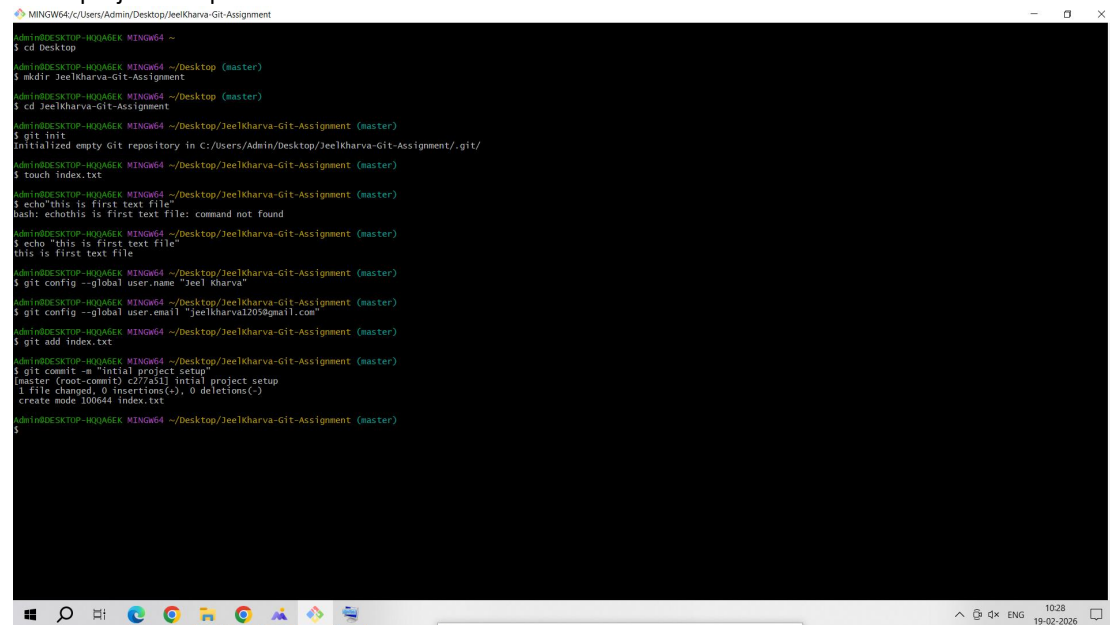
1. Create a folder named git-assignment-yourfullname
2. Navigate into the folder
3. Initialize Git repository
4. Create a file named index.txt

5. Check repository status

6. Stage the file

7. Commit with message:

Initial project setup



```
MINGW64 C:\Users\Admin\Desktop\Jeelkharva-Git-Assignment
$ cd desktop
$ cd desktop
$ mkdir Jeelkharva-Git-Assignment
$ cd Jeelkharva-Git-Assignment
$ cd Jeelkharva-Git-Assignment
$ git init
Initialized empty Git repository in C:/Users/Admin/Desktop/Jeelkharva-Git-Assignment/.git/
$ touch index.txt
$ echo "this is first text file"
bash: echothis is first text file: command not found
$ echo "this is first text file"
this is first text file
$ git config --global user.name "Jeel Kharva"
$ git config --global user.email "jeelkharva1205@gmail.com"
$ git add index.txt
$ git commit -m "Initial project setup"
[master (root-commit) c272a31] initial project setup
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 index.txt
$
```

TASK 2: Branch Creation & Work

Goal: Work independently in a branch

Steps:

1. Create a branch named feature-header
2. Switch to feature-header
3. Create a file named header.txt
4. Stage the file
5. Commit with message:
Added header section

```
MINGW64/C:/Users/Admin/Desktop/JeeIkharva-Git-Assignment
admin@DESKTOP-HQQA6EK MINGW64 ~
$ cd Desktop
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop (master)
$ mkdir JeeIkharva-Git-Assignment
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop (master)
$ cd JeeIkharva-Git-Assignment
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git init
Initialized empty Git repository in C:/Users/Admin/Desktop/JeeIkharva-Git-Assignment/.git/
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ touch index.txt
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ echo "this is first text file."
bash: echothis is first text file.: command not found
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ echo "this is first text file."
this is first text file.
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git config --global user.name "JeeIkharva"
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git config --global user.email "jeeikharva1205@gmail.com"
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git add index.txt
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git commit -m "Initial project setup"
[master (root-commit) c277a51] initial project setup
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 index.txt
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git branch feature-header
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git checkout feature-header
Switched to branch 'feature-header'
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (feature-header)
$ touch header.txt
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (feature-header)
$ add header.txt
bash: add: command not found
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (feature-header)
$ git add header.txt
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (feature-header)
$
```

TASK 3: Branch Switching Observation

Goal: Observe branch isolation

Steps:

1. Switch back to master
2. List files and observe
3. Switch again to feature-header
4. List files and observe

```
MINGW64/C:/Users/Admin/Desktop/JeeIkharva-Git-Assignment
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git checkout <commit-id>
bash: syntax error near unexpected token 'newline'
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git log
commit c277a51eb1caaf1af0578d75e80cf32fb0f851d5 (HEAD -> master)
Author: JeeIkharva <jeeikharva1205@gmail.com>
Date: Thu Feb 19 10:27:43 2026 +0530

    initial project setup
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git checkout <commit-id>
bash: syntax error near unexpected token 'newline'
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ AC
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git log
commit c277a51eb1caaf1af0578d75e80cf32fb0f851d5 (HEAD -> master)
Author: JeeIkharva <jeeikharva1205@gmail.com>
Date: Thu Feb 19 10:27:43 2026 +0530

    initial project setup
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git checkout AC
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git checkout c277a51eb1caaf1af0578d75e80cf32fb0f851d5
error: pathspec 'c277a51eb1caaf1af0578d75e80cf32fb0f851d5' did not match any file(s) known to git
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment (master)
$ git checkout c277a51
Note: switching to 'c277a51'.
You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

    git switch -c <new-branch-name>
or undo this operation with:

    git switch -
Turn off this advice by setting config variable advice.detachedhead to false
HEAD is now at c277a51 initial project setup
admin@DESKTOP-HQQA6EK MINGW64 ~/Desktop/JeeIkharva-Git-Assignment ((c277a51...))
$
```

TASK 4: Undo a Mistake

Goal: Safely undo file changes

Steps:

1. In feature-header, modify index.txt
2. Check repository status
3. Undo the change using Git
4. Verify status again

```
MINGW64/C/Users/Admin/Desktop/JeeIkharva-Git-Assignment
$ cd
$ git add
nothing specified, nothing added.
hint: Maybe you wanted to say 'git add .' ?
hint: Disable this message with "git config set advice.addEmptyPathsSpec false"
$ git add index.txt
warning: in the working copy of 'index.txt', LF will be replaced by CRLF the next time Git touches it
$ git commit -m "updated index file"
[feature-header 8a2474] updated index file
1 file changed, 1 insertion(+)
$ git status
bash: it: command not found
$ git status
on branch feature-header
nothing to commit, working tree clean
$ git checkout -- index.txt
$ git status
on branch feature-header
nothing to commit, working tree clean
$ git checkout master
switched to branch 'master'
$ git merge feature-header
merge: feature-header - not something we can merge
$ ls
index.txt
$ git log
commit c27751d1caaf1f0376d05bd0c72f00f35d5 (HEAD -> master)
Author: Jee Ikharva <jeeikharva120@gmail.com>
Date: Thu Feb 19 10:27:43 2026 +0530

    initial project setup
$
```

```
MINGW64/C/Users/Admin/Desktop/JeeIkharva-Git-Assignment
$ ll
bash: ll: command not found
$ ls
index.txt
$ git checkout feature-header
switched to branch 'feature-header'
$ ls
header.txt index.txt
$ echo "wrong line added" >> index.txt
$ git status
on branch feature-header
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:   index.txt
no changes added to commit (use "git add" and/or "git commit -a")
$ cd
$ git add
nothing specified, nothing added.
hint: Maybe you wanted to say 'git add .' ?
hint: Disable this message with "git config set advice.addEmptyPathsSpec false"
$ git add index.txt
warning: in the working copy of 'index.txt', LF will be replaced by CRLF the next time Git touches it
$ git commit -m "updated index file"
[feature-header 8a2474] updated index file
1 file changed, 1 insertion(+)
$ git status
bash: it: command not found
$ git status
on branch feature-header
nothing to commit, working tree clean
$
```

TASK 5: Merge Feature Branch

Goal: Combine work into master

Steps:

1. Switch to master
2. Merge feature-header
3. Verify merged files
4. Check commit history

```
MINGW64/C/Users/Admin/Desktop/JeelKharya-Git-Assignment
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (feature-header)
$ echo "wrong line added" >> index.txt
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (feature-header)
$ git status
On branch feature-header
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:   index.txt

no changes added to commit (use "git add" and/or "git commit -a")
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (feature-header)
$ !C
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (feature-header)
$ git add
Nothing specified, nothing added.
hint: Maybe you wanted to say "git add ."?
hint: Disable this message with "git config set advice.addEmptyPathspec false"
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (feature-header)
$ git add index.txt
warning: in the working copy of 'index.txt', LF will be replaced by CRLF the next time Git touches it
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (feature-header)
$ git commit -m "updated index file"
[feature-header 8a2474] updated index file
 1 file changed, 1 insertion(-)
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (feature-header)
$ git status
bash: !t: command not found
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (feature-header)
$ git status
On branch feature-header
nothing to commit, working tree clean
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (feature-header)
$ git checkout -- index.txt
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (feature-header)
$ git status
On branch feature-header
nothing to commit, working tree clean
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (feature-header)
$ git checkout master
Switched to branch 'master'
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (master)
$ git merge feature-header
merge: feature-header - not something we can merge
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (master)
$ !
```

TASK 6: Checkout a Commit (Detached HEAD)

Goal: Understand commit-level navigation

Steps:

1. View commit history
2. Checkout any older commit
3. Check current branch status
4. Switch back safely to master

```
MINGW64/C/Users/Admin/Desktop/JeelKharya-Git-Assignment
Date: Thu Feb 19 10:27:43 2026 +0530

initial project setup
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (master)
$ git checkout -commit-id-10
bash: syntax error near unexpected token 'newline'
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (master)
$ !C
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (master)
$ git log
commit c277a51eb1caa1af0578d75e80cf32fb0f851d5 (HEAD -> master)
Author: Jeel Kharya <jeelkharya1205@gmail.com>
Date: Thu Feb 19 10:27:43 2026 +0530

initial project setup
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (master)
$ git checkout !C
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (master)
$ git checkout c277a51eb1caa1af0578d75e80cf32fb0f851d5
error: pathspec 'c277a51eb1caa1af0578d75e80cf32fb0f851d5' did not match any file(s) known to git
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (master)
$ git checkout c277a51
Note: switching to 'c277a51'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

  git switch -c <new-branch-name>

or undo this operation with:

  git switch -

Turn off this advice by setting config variable advice.detachedhead to false
HEAD is now at c277a51 initial project setup
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment ((c277a51...))
$ git status
HEAD detached at c277a51
nothing to commit, working tree clean
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment ((c277a51...))
$ git checkout master
Switched to branch 'master'
ad@INBESKTOP-HQJAEK MINGW64 ~/Desktop/JeelKharya-Git-Assignment (master)
$ !
```