

Note: To Show The Changes In Working Directory, Not In Staging Area, We Can Use:

- Run Command: *git diff*

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git diff
warning: in the working copy of 'file-02.txt', LF will be replaced by CRLF the next time Git touches it
diff --git a/file-02.txt b/file-02.txt
index 19b6f1a..fb0283e 100644
--- a/file-02.txt
+++ b/file-02.txt
@@ -1,2 @@
 Jafar Loka New File
+Testing-01

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git status -s
M file-01.txt
M file-02.txt
```

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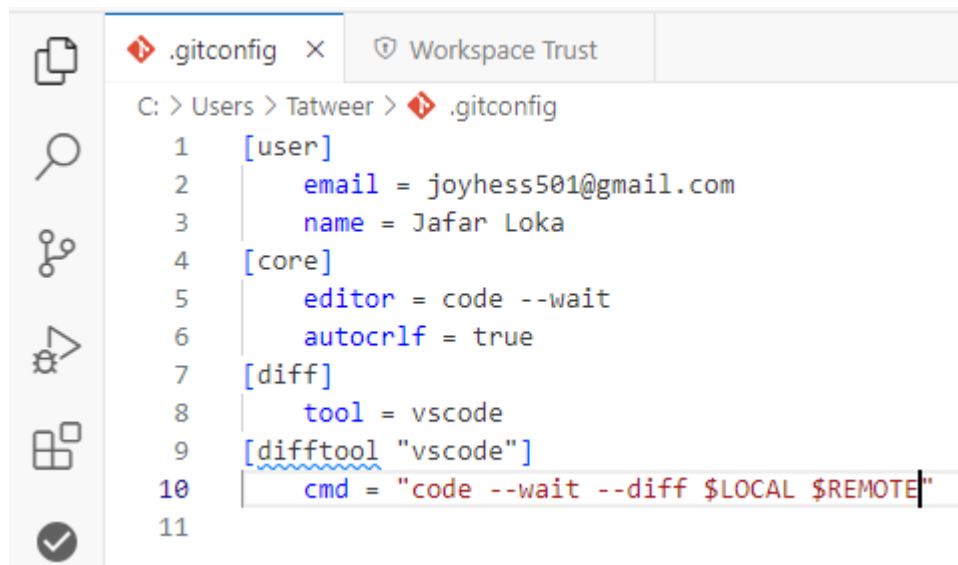
To Set VSCode AS The Diff Tool In Global Config Of Git:

- **Run Command** (This Will Give The Name Only Of Diff Tool): *git config --global diff.tool vscode*
- **Run Command:** *git config --global diff.tool.vscode.cmd "code --wait --diff \$LOCAL \$REMOTE"*
- **Note:** Here We Set \$LOCAL And \$REMOTE Inside The .gitconfig Manually.

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git config --global diff.tool vscode

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git config --global -e

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git config --global difftool.vscode.cmd "code --wait --diff $LOCAL $REMOTE"
```



```
.gitconfig x Workspace Trust
C: > Users > Tatweer > .gitconfig
1  [user]
2      email = joyhess501@gmail.com
3      name = Jafar Loka
4  [core]
5      editor = code --wait
6      autocrlf = true
7  [diff]
8      tool = vscode
9  [difftool "vscode"]
10     cmd = "code --wait --diff $LOCAL $REMOTE"
11
```

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Note: To Start The Diff Tool Of VSCode, We Can Use:

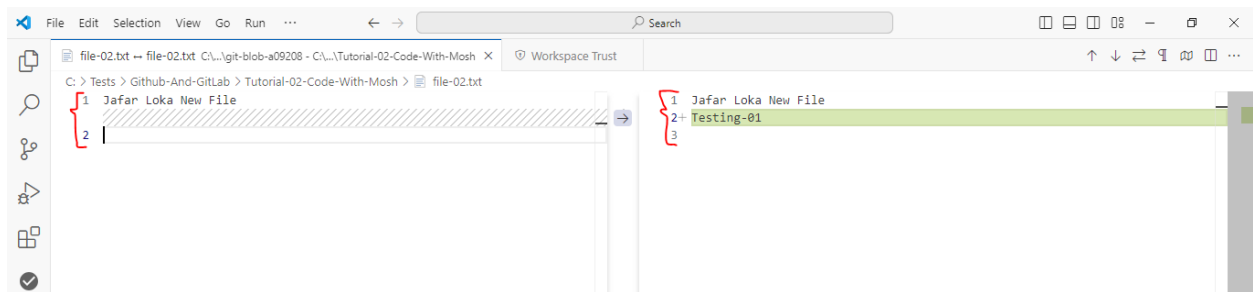
- Run Command: *git diff.tool*
  - In This Way We Show Only Working Area

```
MINGW64:/c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git status -s
M file-01.txt
M file-02.txt

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git difftool
warning: in the working copy of 'file-02.txt', LF will be replaced by CRLF the next time Git touches it

Viewing (1/1): 'file-02.txt'
Launch 'vscode' [Y/n]? |
```



\*\*\*\*\*

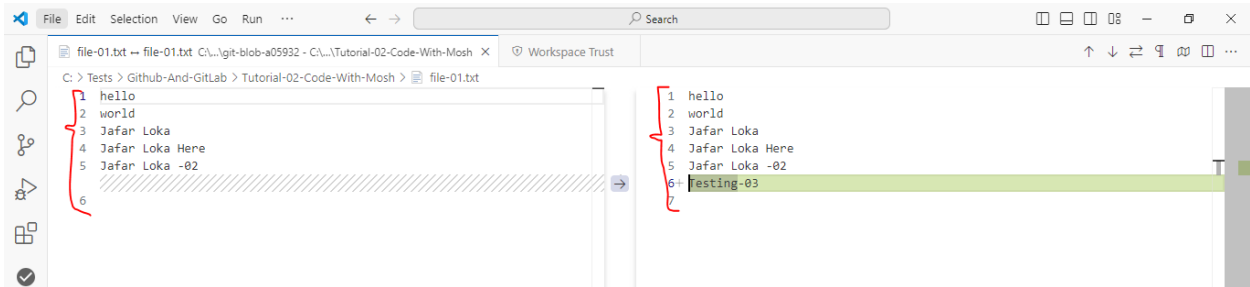
For Staging Area, We Can Run:

- Run Command: *git difftool --staged*

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git status -s
M  file-01.txt
M  file-02.txt

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git difftool --staged

Viewing (1/1): 'file-01.txt'
Launch 'vscode' [Y/n]? y
```



\*\*\*\*\*

Note (To Remember): To View The Commit History Of Our Project, We Can Use:

- Run Command: *git log*

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log
commit 43a35dd34aad1cf03a19ade3141dd07764af7bfe (HEAD -> master)
Author: Jafar Loka <joyhess501@gmail.com>
Date: Tue Nov 19 09:47:37 2024 +0300

    Second Testing Of Files To Show Output

commit c5b550f49466a2f999f95e8e9f1d9c21d09b772c
Author: Jafar Loka <joyhess501@gmail.com>
Date: Tue Nov 19 09:46:56 2024 +0300

    Testing Short Status Command

commit edc693313fb56e9790c69385871703cb5459bc2d
Author: Jafar Loka <joyhess501@gmail.com>
Date: Mon Nov 18 12:23:34 2024 +0200

    Removing File From Index/Staging Area

commit c047d34ec28ef473f9eaba3c617ca3b0e832c44a
Author: Jafar Loka <joyhess501@gmail.com>
Date: Mon Nov 18 12:20:48 2024 +0200

    Adding By Accident

commit 014c4b910348b13f99d26354ecf62b1a1ed6b99b
Author: Jafar Loka <joyhess501@gmail.com>
Date: Mon Nov 18 12:13:31 2024 +0200

    Adding .gitignore To Project

commit 2df21afcf285aa4eb21987665fc58d111c1c963e
Author: Jafar Loka <joyhess501@gmail.com>
Date: Mon Nov 18 12:03:01 2024 +0200

    Trying Rename Files

commit 4702e8272a74259b2fb44d517ae5ac1173247305
Author: Jafar Loka <joyhess501@gmail.com>
Date: Mon Nov 18 11:49:19 2024 +0200

    After Deleting File2.txt

commit c378284382d1d15fa8174219ba3058f3018cec4a
Author: Jafar Loka <joyhess501@gmail.com>
Date: Wed Nov 13 10:28:24 2024 +0200
```

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**Note:** To Show The Short Summary Of Commit History, We Can Use:

- **Run Command:** *git log --oneline*
- **Note:** This Command Show The Commands From End To Start.

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --oneline
43a35dd (HEAD -> master) Second Testing Of Files To Show Output
c5b550f Testing Short Status Command
edc6933 Removing File From Index/Staging Area
c047d34 Adding By Accident
014c4b9 Adding .gitignore To Project
2df21af Trying Rename Files
4702e82 After Deleting File2.txt
c378284 Initial Commit
```

\*\*\*\*\*

**Note:** To Show The Short Summary Of Commit History In Reverse Order From Begin To End, We Can Use:

- **Run Command:** *git log --oneline --reverse*

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --oneline --reverse
c378284 Initial Commit
4702e82 After Deleting File2.txt
2df21af Trying Rename Files
014c4b9 Adding .gitignore To Project
c047d34 Adding By Accident
edc6933 Removing File From Index/Staging Area
c5b550f Testing Short Status Command
43a35dd (HEAD -> master) Second Testing Of Files To Show Output
```

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To Show Details Of Specific Commit, We Can Use:

- Run Command: *git show short-commit-id-here*
  - Ex: *git show* edc6933

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git show
commit 43a35dd34aad1cf03a19ade3141dd07764af7bfe (HEAD -> master)
Author: Jafar Loka <joyhess501@gmail.com>
Date: Tue Nov 19 09:47:37 2024 +0300

    Second Testing Of Files To Show Output

diff --git a/file-01.txt b/file-01.txt
index 56fb3e1..2261396 100644
--- a/file-01.txt
+++ b/file-01.txt
@@ -2,3 +2,4 @@ hello
world
Jafar Loka
Jafar Loka Here
+Jafar Loka -02
```

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To Show Specific Commit After The Head Commit We Can Use:

- Run Command: *git show HEAD~Number-Here*
  - Ex: git show HEAD~2
    - Note: This Will Go 2-Step Back From HEAD Commit.

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git show HEAD
commit 43a35dd34aad1cf03a19ade3141dd07764af7bfe (HEAD -> master)
Author: Jafar Loka <joyhess501@gmail.com>
Date: Tue Nov 19 09:47:37 2024 +0300

    Second Testing Of Files To Show Output

diff --git a/file-01.txt b/file-01.txt
index 56fb3e1..2261396 100644
--- a/file-01.txt
+++ b/file-01.txt
@@ -2,3 +2,4 @@
 hello
 world
 Jafar Loka
 Jafar Loka Here
+Jafar Loka -02

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git show HEAD~2
commit edc693313fb56e9790c69385871703cb5459bc2d
Author: Jafar Loka <joyhess501@gmail.com>
Date: Mon Nov 18 12:23:34 2024 +0200

    Removing File From Index/Staging Area

diff --git a/.gitignore b/.gitignore
index 333c1e9..5191260 100644
--- a/.gitignore
+++ b/.gitignore
@@ -1 +1,2 @@
 logs/
+bin/
diff --git a/bin/test-01.txt b/bin/test-01.txt
deleted file mode 100644
index 345e6ae..0000000
--- a/bin/test-01.txt
+++ /dev/null
@@ -1 +0,0 @@
-Test
```

\*\*\*\*\*



To Show The Detail Of Specific File [For Specific Version Of Project](#), We Can Use:

- Run Command: *git show HEAD~2:.gitignore*
  - Here *.gitignore* is The File That We Want To Show.

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git show HEAD~2:.gitignore
logs/
bin/
```

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To Show All Files And Directories That Are Stored In The Commit:

- Run Command: *git ls-tree commit-id-here*
  - Ex: *git ls-tree HEAD*
  - Note: Here Files Represented AS Blob, And Folders Represented AS Tree.

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git ls-tree HEAD
100644 blob 51912609ec27972cefdb1287cf1c5c9fe284b0f5 .gitignore
100644 blob 22613966163f6a8b035d1dd675e0f04eab56cbcb file-01.txt
100644 blob 19b6f1abe2ae8cbc10818813bb8b3fb7a83b3f27 file-02.txt
```

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git ls-tree HEAD~2
100644 blob 51912609ec27972cefdb1287cf1c5c9fe284b0f5 .gitignore
100644 blob 33dc114a5654b987ac4bd7f03d97d5d2690b5473 file-01.txt
```

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git ls-tree HEAD~3
100644 blob 333c1e910a3e2bef1b9d0d4587392627d8388974 .gitignore
040000 tree 82661735da52591108677e352e22fecac61d2604 bin
100644 blob 33dc114a5654b987ac4bd7f03d97d5d2690b5473 file-01.txt
```

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## GIT OBJECTS

- Commits
- Blobs (Files)
- Trees (Directories)
- Tags

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