To Restore Files And Directories From Staging Area:

- **Run Command**: *git restore --staged file-name-here.extension*
  - o **Ex**: *git restore --staged file-01.txt*
  - o **Note:** Here We Can List Files And Use Patterns:
    - ▪ **Ex1:** *git restore –staged file-01.txt file2.txt *.js*

```
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 restore --staged file-01.txt

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
```

****

To Discard The Changes For Files:

- Run Command: git restore files
  - o Ex: git restore file-01.txt

```
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 restore .

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

****

If We Have New File That Doesn't Have Any Previous Version, To Discard The Changes On It:

- **Run Command**: *git clean -fd*

****

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ echo "Hello World" > file-03.txt

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git status -s
?? file-03.txt

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git add .
warning: in the working copy of 'file-03.txt', LF will be replaced by CRLF the next time Git touches it

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git status -s
A  file-03.txt

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git rm file-03.txt
error: the following file has changes staged in the index:
    file-03.txt
(use --cached to keep the file, or -f to force removal)

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git status -s
A  file-03.txt

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git rm --cached file-03.txt
rm 'file-03.txt'

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git status -s
?? file-03.txt

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git rm file-03.txt
fatal: pathspec 'file-03.txt' did not match any files

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git commit -m "Deleting Files Using git rm"
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        file-03.txt

nothing added to commit but untracked files present (use "git add" to track)

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ ls
bin/  file-01.txt  file-02.txt  file-03.txt  logs/
```

****

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

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git ls-files
.gitignore
file-01.txt
file-02.txt
file-03.txt

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git rm file-03.txt
rm 'file-03.txt'

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git status -s
D  file-03.txt

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git commit -m "Deleting The New File: file-03.txt"
[master 715de30] Deleting The New File: file-03.txt
 1 file changed, 1 deletion(-)
 delete mode 100644 file-03.txt
```
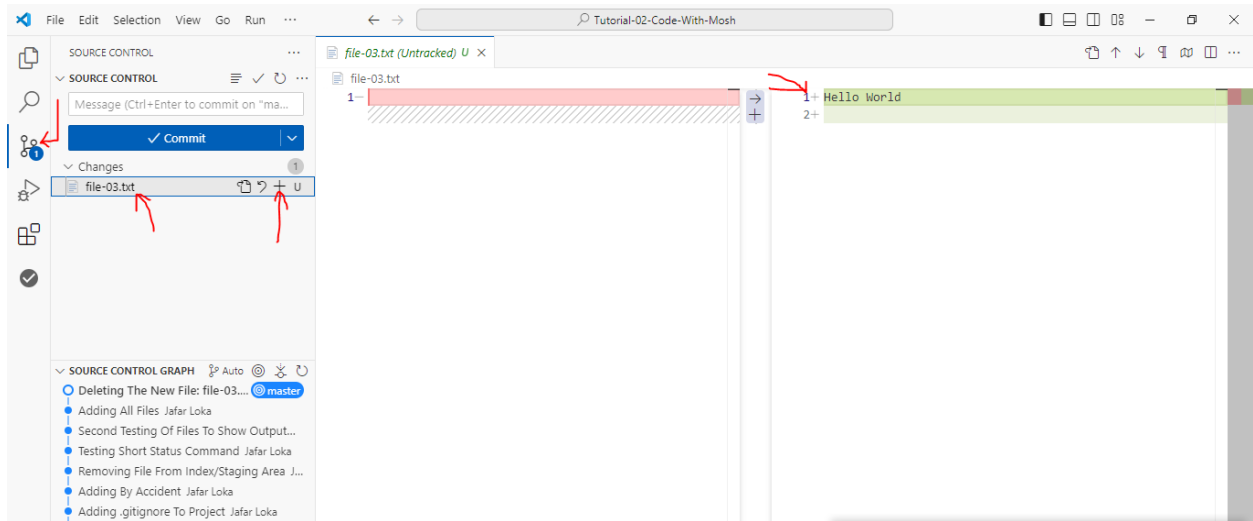
****

To Restore The File That We Delete It:

- **Run Command**: *git restore --source=HEAD~1 file-03.txt*
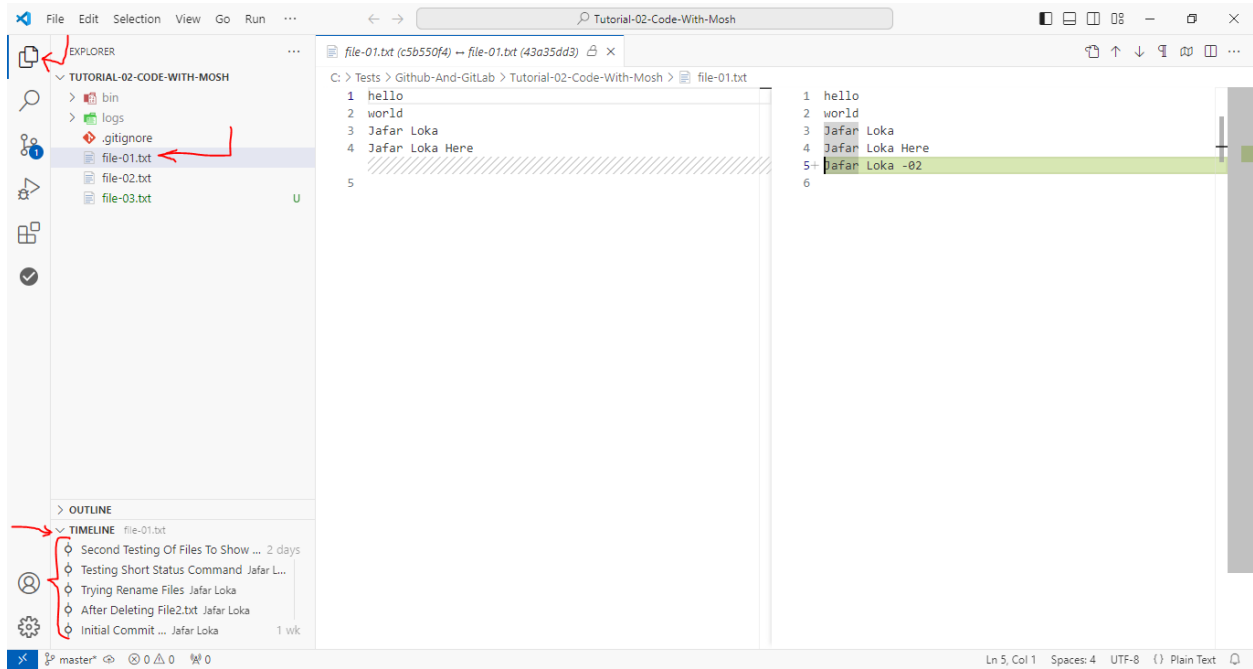 - o **Note**: Here We Restore It From One Previous Step Backward.

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git restore --source=HEAD~1 file-03.txt

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git status -s
?? file-03.txt
```

****

****

****

If We Want To See All The Files' Changes With The Commit:

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

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With
-Mosh (master)
$ git log --oneline --stat
715de30 (HEAD -> master) Deleting The New File: file-03.txt
 file-03.txt | 1 -
 1 file changed, 1 deletion(-)
1b6514e Adding All Files
 file-03.txt | 1 +
 1 file changed, 1 insertion(+)
43a35dd Second Testing Of Files To Show Output
 file-01.txt | 1 +
 1 file changed, 1 insertion(+)
c5b550f Testing Short Status Command
 file-01.txt | 1 +
 file-02.txt | 1 +
 2 files changed, 2 insertions(+)
edc6933 Removing File From Index/Staging Area
 .gitignore      | 1 +
 bin/test-01.txt | 1 -
 2 files changed, 1 insertion(+), 1 deletion(-)
c047d34 Adding By Accident
 bin/test-01.txt | 1 +
 1 file changed, 1 insertion(+)
014c4b9 Adding .gitignore To Project
 .gitignore | 1 +
 1 file changed, 1 insertion(+)
2df21af Trying Rename Files
 file1.txt => file-01.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
4702e82 After Deleting File2.txt
 file1.txt | 1 +
 file2.txt | 1 -
 2 files changed, 1 insertion(+), 1 deletion(-)
c378284 Initial Commit
 file1.txt | 2 ++
 file2.txt | 1 +
 2 files changed, 3 insertions(+)
```

****

To Get The Full Detailed Of Our Log:

- **Run Command**: *git log --stat*

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --stat
commit 715de30c5650364dbd9500c0ded5d554e2c2e63c (HEAD -> master)
Author: Jafar Loka <joyhess501@gmail.com>
Date:   Thu Nov 21 10:38:42 2024 +0300

    Deleting The New File: file-03.txt

 file-03.txt | 1 -
 1 file changed, 1 deletion(-)

commit 1b6514e429081d5f635302d6e8be52cee9750903
Author: Jafar Loka <joyhess501@gmail.com>
Date:   Thu Nov 21 10:37:52 2024 +0300

    Adding All Files

 file-03.txt | 1 +
 1 file changed, 1 insertion(+)

commit 43a35dd34aad1cf03a19ade3141dd07764af7bfe
Author: Jafar Loka <joyhess501@gmail.com>
Date:   Tue Nov 19 09:47:37 2024 +0300

    Second Testing Of Files To Show Output

 file-01.txt | 1 +
 1 file changed, 1 insertion(+)

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

    Testing Short Status Command

 file-01.txt | 1 +
 file-02.txt | 1 +
 2 files changed, 2 insertions(+)

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

    Removing File From Index/Staging Area

 .gitignore     | 1 +
 bin/test-01.txt | 1 -
 2 files changed, 1 insertion(+), 1 deletion(-)
```

****

To See The Actual Changes To The Files And Commits:

- Run Command: git log --patch

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --oneline --patch
715de30 (HEAD -> master) Deleting The New File: file-03.txt
diff --git a/file-03.txt b/file-03.txt
deleted file mode 100644
index 557db03..0000000
--- a/file-03.txt
+++ /dev/null
@@ -1 +0,0 @@
-Hello World
1b6514e Adding All Files
diff --git a/file-03.txt b/file-03.txt
new file mode 100644
index 0000000..557db03
--- /dev/null
+++ b/file-03.txt
@@ -0,0 +1 @@
+Hello World
43a35dd 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
c5b550f Testing Short Status Command
diff --git a/file-01.txt b/file-01.txt
index 33dc114..56fb3e1 100644
--- a/file-01.txt
+++ b/file-01.txt
@@ -1,3 +1,4 @@
 hello
 world
 Jafar Loka
+Jafar Loka Here
diff --git a/file-02.txt b/file-02.txt
new file mode 100644
index 0000000..19b6f1a
--- /dev/null
+++ b/file-02.txt
@@ -0,0 +1 @@
+Jafar Loka New File
edc6933 Removing File From Index/Staging Area
diff --git a/.gitignore b/.gitignore
index 333c1e9..5191260 100644
--- a/.gitignore
```

****

To Get Specific Number Of Commits From Last One:

- **Run Command**: *git log --oneline -NumberHere*
  - **Ex**: *git log --oneline -3*

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --oneline -3
715de30 (HEAD -> master) Deleting The New File: file-03.txt
1b6514e Adding All Files
43a35dd Second Testing Of Files To Show Output
```

****

To Filter Log Data Depending On Author:

- **Run Command**: *git log --oneline --author="Name-Here"*
  - **Ex**: *git log --author="Jafar"*

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --oneline --author="Jafar"
715de30 (HEAD -> master) Deleting The New File: file-03.txt
1b6514e Adding All Files
43a35dd 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
```

****

To Get The Log Of Commits Before OR After Specific Date:

- **Run Command**: *git log --oneline --after="YYYY-MM-DD"*
- **Run Command**: *git log --before="YYYY-MM-DD"*

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --oneline --after="2024-11-20"
715de30 (HEAD -> master) Deleting The New File: file-03.txt
1b6514e Adding All Files

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --oneline --before="2024-11-20"
43a35dd 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
```

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --oneline --after="yesterday"

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --oneline --before="yesterday"
715de30 (HEAD -> master) Deleting The New File: file-03.txt
1b6514e Adding All Files
43a35dd 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
```

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --oneline --after="one week ago"
715de30 (HEAD -> master) Deleting The New File: file-03.txt
1b6514e Adding All Files
43a35dd 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
```

****

To Filter The Commits Depending On Specific Terms:

- **Run Command**: *git log --oneline --grep="Text-Here"*
  - ○ **Ex**: *git log --oneline --grep="Test"*
  - ○ **Note**: It is Case Sensitive

```
Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --oneline --grep="Test"
43a35dd Second Testing Of Files To Show Output
c5b550f Testing Short Status Command

Tatweer@DESKTOP-9FV4RTN MINGW64 /c/Tests/Github-And-GitLab/Tutorial-02-Code-With-Mosh (master)
$ git log --oneline --grep="test"
```

****