

VCS Assignment 2

Exercise 1: Create your first Commit.

```
krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ git init Exercise_1
Initialized empty Git repository in C:/Users/krish/OneDrive/Desktop/GitExcercise/Exercise_1/.git/

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ cd Exercise_1

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_1 (master)
$ touch index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_1 (master)
$ git add index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_1 (master)
$ git commit -m "Initial Message"
[master (root-commit) f4ca246] Initial Message
 1 file changed, 9 insertions(+)
 create mode 100644 index.html
```

Exercise 2: Commit only one file.

```
krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ git init Exercise_2
Initialized empty Git repository in C:/Users/krish/OneDrive/Desktop/GitExcercise/Exercise_2/.git/

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ cd Exercise_2

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_2 (master)
$ touch index.html about.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_2 (master)
$ git add index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_2 (master)
$ git commit -m "File index.html added"
[master (root-commit) 107a526] File index.html added
 1 file changed, 9 insertions(+)
 create mode 100644 index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_2 (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    about.html

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

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_2 (master)
```

Exercise 3: Modify the last commit.

```
krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ git init Exercise_3
Initialized empty Git repository in C:/Users/krish/OneDrive/Desktop/GitExcercise/Exercise_3/.git/

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ cd Exercise_3

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_3 (master)
$ touch index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_3 (master)
$ git add index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_3 (master)
$ git commit -m "adding index.html."
[master (root-commit) 19559ca] adding index.html.
1 file changed, 9 insertions(+)
create mode 100644 index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_3 (master)
$ touch about.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_3 (master)
$ git add about.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_3 (master)
$ git commit --amend -m "Adding index.html and about.html"
[master 56dacb1] Adding index.html and about.html
Date: Wed Mar 5 22:39:26 2025 -0600
2 files changed, 18 insertions(+)
create mode 100644 about.html
create mode 100644 index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_3 (master)
$ git status
On branch master
nothing to commit, working tree clean
```

Exercise 4: Create git ignore file

```
krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ git init Exercise_4
Initialized empty Git repository in C:/Users/krish/OneDrive/Desktop/GitExcercise/Exercise_4/.git/

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ cd Exercise_4

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_4 (master)
$ touch .gitignore

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_4 (master)
$ echo "*.exe" >> .gitignore

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_4 (master)
$ echo "*.o" >> .gitignore

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_4 (master)
$ echo "*.jar" >> .gitignore

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_4 (master)
$ echo "libraries/" >> .gitignore

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_4 (master)
$ cat .gitignore
*.exe
*.o
*.jar
libraries/
```

Exercise 5: Save your work with stash.

```
krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ git init Exercise_5
Initialized empty Git repository in C:/Users/krish/OneDrive/Desktop/GitExcercise/Exercise_5/.git/

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ cd Exercise_5

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_5 (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Q1.ipynb
        Q2.ipynb
        Q3.ipynb

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

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_5 (master)
$ git add .
warning: in the working copy of 'Q1.ipynb', LF will be replaced by CRLF the next
time Git touches it
warning: in the working copy of 'Q2.ipynb', LF will be replaced by CRLF the next
time Git touches it
warning: in the working copy of 'Q3.ipynb', LF will be replaced by CRLF the next
time Git touches it

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_5 (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   Q1.ipynb
        new file:   Q2.ipynb
        new file:   Q3.ipynb

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_5 (master)
$ git stash
You do not have the initial commit yet

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_5 (master)
$ git stash list
```

Exercise 6: Reset Previous Commit Keeping changes. (Soft Reset)

```

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_6 (master)
$ ls
Q1.ipynb

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_6 (master)
$ git add Q1.ipynb
warning: in the working copy of 'Q1.ipynb', LF will be replaced by CRLF the next
time Git touches it

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_6 (master)
$ git commit -m "intial commit of Q1.ipynb"
[master (root-commit) 7cd9afe] intial commit of Q1.ipynb
1 file changed, 58 insertions(+)
create mode 100644 Q1.ipynb

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_6 (master)
$ git add Q2.ipynb
warning: in the working copy of 'Q2.ipynb', LF will be replaced by CRLF the next
time Git touches it

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_6 (master)
$ git commit -m "Adding Q2.ipynb"
[master 2672b23] Adding Q2.ipynb
1 file changed, 62 insertions(+)
create mode 100644 Q2.ipynb

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_6 (master)
$ git add Q3.ipynb
warning: in the working copy of 'Q3.ipynb', LF will be replaced by CRLF the next
time Git touches it

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_6 (master)
$ git log --online
fatal: unrecognized argument: --online

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_6 (master)
$ git log --oneline
2672b23 (HEAD -> master) Adding Q2.ipynb
7cd9afe intial commit of Q1.ipynb

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_6 (master)
$ git reset --soft HEAD~1

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_6 (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   Q2.ipynb
        new file:   Q3.ipynb

```

Exercise 7: Reset Previous Commit (Hard Reset).

```

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ cd Exercise_7

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_7 (master)
$ git add Q1.ipynb
warning: in the working copy of 'Q1.ipynb', LF will be replaced by CRLF the next
time Git touches it

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_7 (master)
$ git commit -m "Initial commit of Q1.ipynb"
[master (root-commit) a38d835] Initial commit of Q1.ipynb
1 file changed, 58 insertions(+)
create mode 100644 Q1.ipynb

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_7 (master)
$ git add Q2.ipynb
warning: in the working copy of 'Q2.ipynb', LF will be replaced by CRLF the next
time Git touches it

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_7 (master)
$ git commit -m "Added Q2.ipynb"
[master 2354708] Added Q2.ipynb
1 file changed, 62 insertions(+)
create mode 100644 Q2.ipynb

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_7 (master)
$ git add Q3.ipynb
warning: in the working copy of 'Q3.ipynb', LF will be replaced by CRLF the next
time Git touches it

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_7 (master)
$ git commit -m "Added Q3.ipynb"
[master 8e3be77] Added Q3.ipynb
1 file changed, 75 insertions(+)
create mode 100644 Q3.ipynb

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_7 (master)
$ git log --oneline
8e3be77 (HEAD -> master) Added Q3.ipynb
2354708 Added Q2.ipynb
a38d835 Initial commit of Q1.ipynb

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_7 (master)
$ git reset --hard HEAD~1
HEAD is now at 2354708 Added Q2.ipynb

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_7 (master)
$ git status
On branch master
nothing to commit, working tree clean

```

Exercise 8: Merge branch (No Conflicts).

```

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ git init Exercise_8
Initialized empty Git repository in C:/Users/krish/OneDrive/Desktop/GitExcercise
/Exercise_8/.git/

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ cd Exercise_8

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_8 (master)
$ git add index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_8 (master)
$ git commit -m "Initial commit with index.html"
[master (root-commit) 508aa50] Initial commit with index.html
1 file changed, 9 insertions(+)
create mode 100644 index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_8 (master)
$ git checkout -b my-feature
Switched to a new branch 'my-feature'

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_8 (my-featur
e)
$ git add about_us.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_8 (my-featur
e)
$ git commit -m "Added about_us.html in my-feature branch"
[my-feature 84265e9] Added about_us.html in my-feature branch
1 file changed, 9 insertions(+)
create mode 100644 about_us.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_8 (my-featur
e)
$ git checkout master
Switched to branch 'master'

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_8 (master)
$ git merge my-feature
Updating 508aa50..84265e9
Fast-forward
 about_us.html | 9 ++++++++
1 file changed, 9 insertions(+)
create mode 100644 about_us.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_8 (master)
$ git status
On branch master
nothing to commit, working tree clean

```

Exercise 9: Merge branch (Conflicts).


```

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ git init Exercise_9
Reinitialized existing Git repository in C:/Users/krish/OneDrive/Desktop/GitExcercise/Exercise_9/.git/

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise
$ cd Exercise_9

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (master)
$ git add index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (master)
$ git commit -m "Initial commit index.html"
On branch master
nothing to commit, working tree clean

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (master)
$ git checkout -b my-feature
fatal: a branch named 'my-feature' already exists

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (master)
$ git checkout -b my-feature1
Switched to a new branch 'my-feature1'

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (my-feature1)
$ git add about_us.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (my-feature1)
$ echo "<p> This is an update in my-feature branch.</p>" >> index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (my-feature1)
$ git add index.html
warning: in the working copy of 'index.html', LF will be replaced by CRLF the next time git touches it

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (my-feature1)
$ git commit -m "Updated index.html in my-feature branch"
[my-feature1 7abd0c3] Updated index.html in my-feature branch
1 file changed, 1 insertion(+), 1 deletion(-)

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (my-feature1)
$ git checkout master
Switched to branch 'master'

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (master)
$ echo "<p> This is an update in the master branch.</p>" >> index.html

```

```

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (master)
$ echo "<p> This is an update in the master branch.</p>" >> index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (master)
$ git add index.html
warning: in the working copy of 'index.html', LF will be replaced by CRLF the next time git touches it

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (master)
$ git commit -m "Updated index.html in master branch"
[master e49b7c3] Updated index.html in master branch
1 file changed, 1 insertion(+), 1 deletion(-)

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (master)
$ git merge my-feature1
Auto-merging index.html
CONFLICT (content): Merge conflict in index.html
Automatic merge failed; fix conflicts and then commit the result.

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (master|MERGING)
$ git add index.html

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (master|MERGING)
$ git commit -m "Resolved merge conflict in index.html by including both changes"
[master 10f6f37] Resolved merge conflict in index.html by including both changes

krish@KRISHNAKANTH MINGW64 ~/OneDrive/Desktop/GitExcercise/Exercise_9 (master)
$ git status
On branch master
nothing to commit, working tree clean

```