

# 15.13Apr.GitAdv(Reset, Rebase, Interview QnA)

13 April 2023 07:09 PM

Reset

Commit1

Commit2

Commit3

Commit4

Commit5

Commit6

--soft

--hard

--mixed

```
$ git log --oneline
```

```
13078f0 (HEAD -> master) m4
```

```
1be7ea5 m4
```

```
b85b0c9 m3
```

```
8689b4d m2
```

```
3cd5fbc master added
```

```
$ git reset b85b0c9
```

```
$ git log --oneline
```

```
13078f0 m5
```

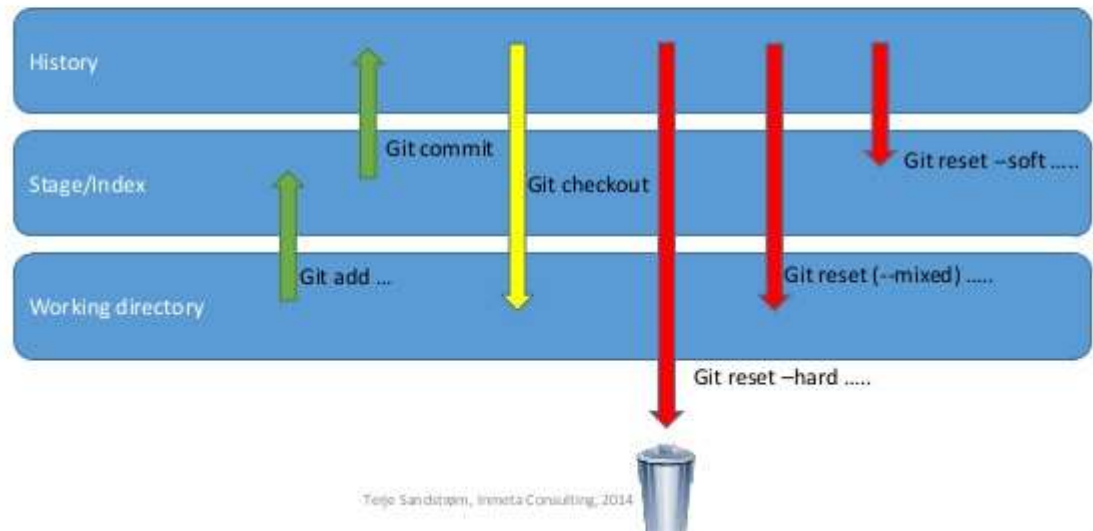
```
1be7ea5 m4
```

```
B85b0c9 (HEAD -> master) m3
```

```
8689b4d m2
```

```
3cd5fbc master added
```

# Git tree movements visualized



```
$ git branch -D master    # Delete Local branch
```

```
$ git checkout origin/master -b master
```

```
$ echo Welcome > master.txt
```

```
$ git add master.txt    Working Directory Area ---> Staging Area
```

```
$ git rm master.txt
```

master	
B1	B2

```
$ git diff [sourceBranch] [targetBranch]    # Preview changes before merging
```

```
$ git remote add origin http://github.com/uscompany/usproject.git
```

```
$ git push -u origin master
```

```
$ git push origin
```

```
$ git remote show
```

```
$ git remote add uae http://github.com/uaeconomy/uaeconomy.git
```

```
$ git push -u uae master
```

```
$ git push origin --delete branch10    # delete a remote branch
```

```
$ git pull origin branch25
```

```
$ git restore --staged abc.py
```

```
$ git restore --staged .
```

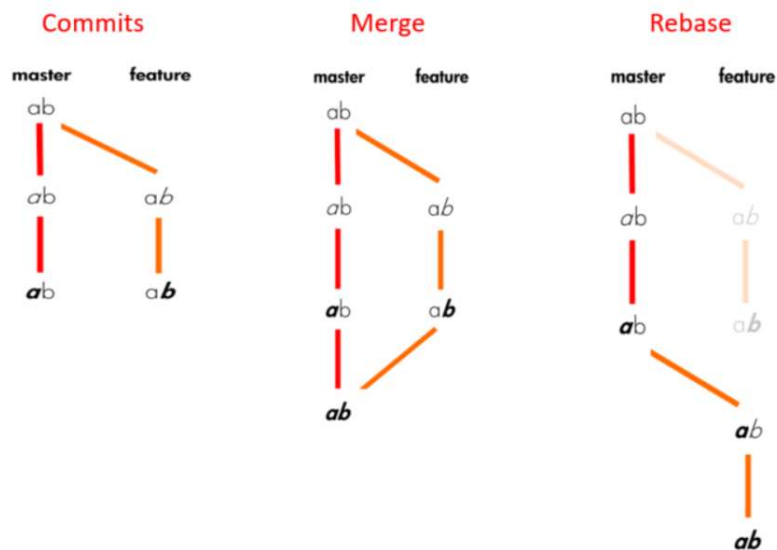
R1

master            c1 --> c2 --> c3            .

Ramesh

F1                            c3 --> c4 --> c5

Santosh



A -- B -- C    feature1  
D -- E -- F -- G    master

```
$ git rebase master feature
```

D -- E -- F -- G -- A -- B -- C    master(feature1)

Rebase:

- Takes a starting commit and replays your commit as coming after theirs
- Moves commits from the current branch to another branch

1. Reset
2. Rebase(Merge+1 Commit)
3. Revert

1. Git Areas( Working Directory Area, Staging, Local Repo. , Remote Repo.)
2. Git Important commands( git add, commit, push, pull, init, clone, config, etc)
3. Branch Management Commands( branch, checkout)
4. Difference Tool : \$ git diff (kdiff3, meld)
5. Merge
  - a. Non- Conflict
  - b. Conflict
6. Pull (Remote --> Work Directory)
7. Fetch(Remote --> Local Repo.)
8. Collaboration(Practical Rebase) & Linux( Dual Boot, Single Boot, Oracle VirtualBox ) --> Kali (SysSecOps)

F1.txt ---> F1.txt

#### DevOps

- Maven(10%) --> Jenkins

4. Git Adv Cmds
5. Setup Kali
6. Linux Commands
7. Basics YAML
8. Github Actions

#### Windows:

4GB --> 8/16GB

#### SysOps

- Linux
- Security
- SQL --> YAML
- Pipeline (Github Action/ GitLab Action)
- Ansible
- TF
- Docker
- Kubernetes

#### Cloud

- Cloud(IaaS, PaaS, IaaSC)
- ClouOps

#### Git

- What is Git?
- CVCS vs DVCS

- Clone vs Download
- Why Branch
- How to Merge Conflict
- Pull vs Fetch
- Merge vs Rebase
- Origin
- Area in Git
- Git Tag
  
- Release Plan
- Branching Principal