

GIT COMMANDS

1. Open the git bash
2. For checking the git version
git --version
3. Setting the user name and email id

```
MINGW64:/c/Users/NANA

NANA@SACHIN MINGW64 ~ (master)
$ git config --global user.name
Sachin Gawade

NANA@SACHIN MINGW64 ~ (master)
$ git config --global user.name "Sachin Rangnath Gawade"

NANA@SACHIN MINGW64 ~ (master)
$ git config --global user.name
Sachin Rangnath Gawade

NANA@SACHIN MINGW64 ~ (master)
$ git config --global user.email
saching3234@gmail.com

NANA@SACHIN MINGW64 ~ (master)
$ git config --global user.email "saching3234@gmail.com"

NANA@SACHIN MINGW64 ~ (master)
$ git config --global user.email
saching3234@gmail.com

NANA@SACHIN MINGW64 ~ (master)
$ |
```

4. Editing the details using the edit command

```
NANA@SACHIN MINGW64 ~ (master)
$ git config --global --edit

NANA@SACHIN MINGW64 ~ (master)
$ git config --global user.name
Sachin Gawade

NANA@SACHIN MINGW64 ~ (master)
$
```

```
MINGW64:/c:/Users/NANA
[filter "lfs"]
    clean = git-lfs clean -- %f
    smudge = git-lfs smudge -- %f
    process = git-lfs filter-process
    required = true

[user]
    name = Sachin Gawade
    email = saching3234@gmail.com

[credential "helperselector"]
    selected = manager-core
```

```
C:/Users/NANA/.gitconfig[+] [unix] (11:59 16/01/2023)
: wq
```

5. Making repository and initializing it

```
MINGW64/c/Users/NANA/sachin

NANA@SACHIN MINGW64 ~ (master)
$ mkdir sachin

NANA@SACHIN MINGW64 ~ (master)
$ cd sachin

NANA@SACHIN MINGW64 ~/sachin (master)
$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in C:/Users/NANA/sachin/.git/

NANA@SACHIN MINGW64 ~/sachin (master)
$ ls -a
./ ../ .git/

NANA@SACHIN MINGW64 ~/sachin (master)
$ |
```

6. After creating the Sum.java file

7. Git status

```
MINGW64/c/Users/NANA/sachin

NANA@SACHIN MINGW64 ~/sachin (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    Sum.java

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

NANA@SACHIN MINGW64 ~/sachin (master)
$ |
```

8. Adding the Sum.java file in the staging area

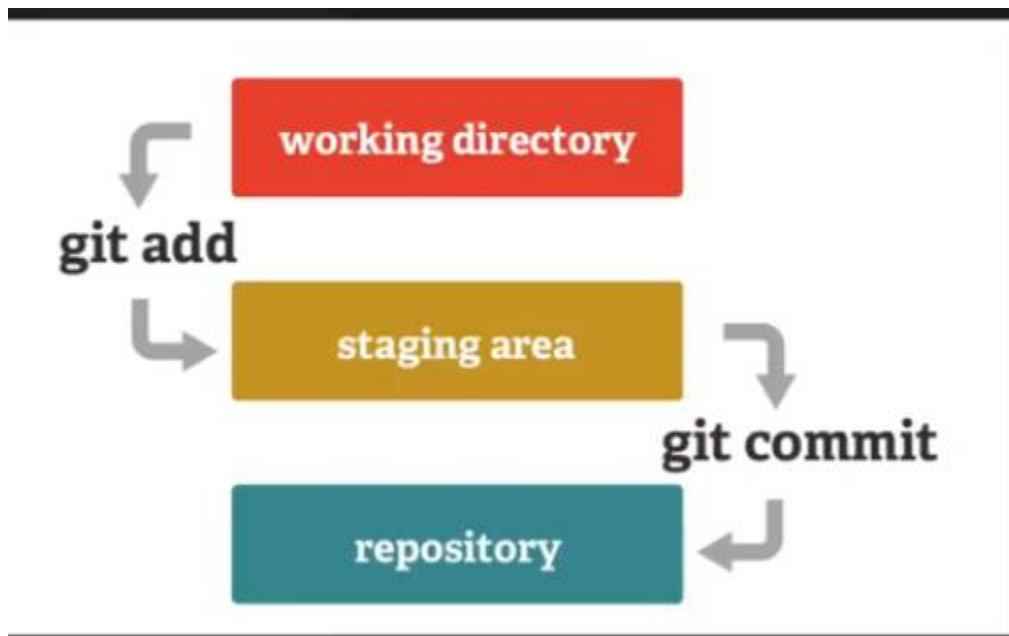
```
NANA@SACHIN MINGW64 ~/sachin (master)
$ git add Sum.java

NANA@SACHIN MINGW64 ~/sachin (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   Sum.java

NANA@SACHIN MINGW64 ~/sachin (master)
$ |
```



9. Committing the staging area file by git commit -m "commit msg"

```
NANA@SACHIN MINGW64 ~/sachin (master)
$ git commit -m "intial commit"
[master (root-commit) fd3af53] intial commit
1 file changed, 7 insertions(+)
create mode 100644 Sum.java

NANA@SACHIN MINGW64 ~/sachin (master)
$ git log
commit fd3af53605b97954a642d7ea320a6aa2abb5f0d6 (HEAD -> master)
Author: Sachin Gawade <saching3234@gmail.com>
Date: Mon Jan 16 12:43:11 2023 +0530

    intial commit
```

10. git add . :-this command is used to add all unstaged files in the staging area
11. git log :- this command is used see the log details or previous activity details.

```
NANA@SACHIN MINGW64 ~/sachin (master)
$ git log
commit 961b3a7997926695d919648d509cf46d1478d860 (HEAD -> master)
Author: Sachin Gawade <saching3234@gmail.com>
Date: Mon Jan 16 14:52:35 2023 +0530

    sum.java added

commit 48578058212874ee95d0f73aa640d66b52fab23e
Author: Sachin Gawade <saching3234@gmail.com>
Date: Mon Jan 16 14:49:45 2023 +0530

    adding Diff.java

commit fd3af53605b97954a642d7ea320a6aa2abb5f0d6
Author: Sachin Gawade <saching3234@gmail.com>
Date: Mon Jan 16 12:43:11 2023 +0530

    intial commit

NANA@SACHIN MINGW64 ~/sachin (master)
$ |
```

12. git checkout hash code is used to jump to that commit state

```

NANA@SACHIN MINGW64 ~/sachin (master)
$ git checkout fd3af53605b97954a642d7ea320a6aa2abb5f0d6
Note: switching to 'fd3af53605b97954a642d7ea320a6aa2abb5f0d6'.

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 fd3af53 initial commit

NANA@SACHIN MINGW64 ~/sachin ((fd3af53...))
$ git log
commit fd3af53605b97954a642d7ea320a6aa2abb5f0d6 (HEAD)
Author: Sachin Gawade <saching3234@gmail.com>
Date:   Mon Jan 16 12:43:11 2023 +0530

    initial commit

NANA@SACHIN MINGW64 ~/sachin ((fd3af53...))
$ |

```

13. git checkout master :- it is used to go back to previous state

```

NANA@SACHIN MINGW64 ~/sachin ((fd3af53...))
$ git checkout master
Previous HEAD position was fd3af53 initial commit
Switched to branch 'master'

NANA@SACHIN MINGW64 ~/sachin (master)
$ git log
commit 961b3a7997926695d919648d509cf46d1478d860 (HEAD -> master)
Author: Sachin Gawade <saching3234@gmail.com>
Date: Mon Jan 16 14:52:35 2023 +0530

    sum.java added

commit 48578058212874ee95d0f73aa640d66b52fab23e
Author: Sachin Gawade <saching3234@gmail.com>
Date: Mon Jan 16 14:49:45 2023 +0530

    adding Diff.java

commit fd3af53605b97954a642d7ea320a6aa2abb5f0d6
Author: Sachin Gawade <saching3234@gmail.com>
Date: Mon Jan 16 12:43:11 2023 +0530

    initial commit

NANA@SACHIN MINGW64 ~/sachin (master)
$ |

```

14. git branch dev :- it used to make a new dev branch

```

MINGW64:/c/Users/NANA/sachin

NANA@SACHIN MINGW64 ~/sachin (master)
$ git branch dev

NANA@SACHIN MINGW64 ~/sachin (master)
$ git branch
dev
* master

NANA@SACHIN MINGW64 ~/sachin (master)
$ |

```

15. git checkout dev :- this command is used to switch to a dev branch

```
NANA@SACHIN MINGW64 ~/sachin (master)
$ git switch dev
Switched to branch 'dev'

NANA@SACHIN MINGW64 ~/sachin (dev)
$ |
```

16. `git checkout -b sachin/multiply` :- it is used to create a new branch to switch to that branch

```
NANA@SACHIN MINGW64 ~/sachin (dev)
$ git checkout -b sachin/multiply
Switched to a new branch 'sachin/multiply'

NANA@SACHIN MINGW64 ~/sachin (sachin/multiply)
$ |
```

17. `merge` command is used to merge other branch existing branch

```
NANA@SACHIN MINGW64 ~/sachin (dev)
$ git merge sachin/multiply
Updating 961b3a7..314e922
Fast-forward
 Multiply.java | 10 ++++++++
 1 file changed, 10 insertions(+)
 create mode 100644 Multiply.java
```


18. git ignore file not track the mentioned files

```
NANA@SACHIN MINGW64 ~/sachin (master)
$ touch .gitignore

NANA@SACHIN MINGW64 ~/sachin (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be commit
ted)
        .gitignore
        secretekey.txt

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

NANA@SACHIN MINGW64 ~/sachin (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be commit
ted)
        .gitignore

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

NANA@SACHIN MINGW64 ~/sachin (master)
$ |
```

19. pushing the code to the github repo

```

MINGW64:/c/Users/NANA/sachin

NANA@SACHIN MINGW64 ~/sachin (master)
$ git remote add origin https://github.com/saching3234/DemoRepo.git

NANA@SACHIN MINGW64 ~/sachin (master)
$ git branch -M main

NANA@SACHIN MINGW64 ~/sachin (main)
$ git push -u origin main
Enumerating objects: 12, done.
Counting objects: 100% (12/12), done.
Delta compression using up to 4 threads
Compressing objects: 100% (10/10), done.
Writing objects: 100% (12/12), 1.23 KiB | 420.00 KiB/s, done.
Total 12 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), done.
To https://github.com/saching3234/DemoRepo.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.

NANA@SACHIN MINGW64 ~/sachin (main)
$ |

```

20. saving the changed file and pushing the same to github repo

```

NANA@SACHIN MINGW64 ~/sachin (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

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:   Diff.java

no changes added to commit (use "git add" and/or "git commit -a")

NANA@SACHIN MINGW64 ~/sachin (main)
$ git add Diff.java

NANA@SACHIN MINGW64 ~/sachin (main)
$ git commit -m "modified the Diff.java file and saved"
[main eb47b79] modified the Diff.java file and saved
1 file changed, 5 insertions(+), 1 deletion(-)

NANA@SACHIN MINGW64 ~/sachin (main)
$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 463 bytes | 463.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/saching3234/DemoRepo.git
 314e922..eb47b79  main -> main

NANA@SACHIN MINGW64 ~/sachin (main)
$ |

```

21. pushing the dev branch to github

```
NANA@SACHIN MINGW64 ~/sachin (dev)
$ git checkout dev
Already on 'dev'

NANA@SACHIN MINGW64 ~/sachin (dev)
$ git push -u origin dev
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'dev' on GitHub by visiting:
remote:   https://github.com/saching3234/DemoRepo/pull/new/dev
remote:
To https://github.com/saching3234/DemoRepo.git
 * [new branch]      dev -> dev
branch 'dev' set up to track 'origin/dev'.
```

```
NANA@SACHIN MINGW64 ~/sachin (dev)
$ |
```

