MCA - I Advanced Software Development Methodologies (ASDM) Git Practical

1. Know your path

imrd@imrdcomp36 MINGW64 ~
\$ pwd
/c/Users/imrd

imrd@imrdcomp36 MINGW64 ~
\$ cd Desktop

imrd@imrdcomp36 MINGW64 ~/Desktop
\$ pwd
/c/Users/imrd/Desktop

2.create your own repository on local computer

imrd@imrdcomp36 MINGW64 ~/Desktop \$ mkdir mca imrd@imrdcomp36 MINGW64 ~/Desktop \$ cd mca imrd@imrdcomp36 MINGW64 ~/Desktop/mca \$ pwd

/c/Users/imrd/Desktop/mca

3.initialize git

imrd@imrdcomp36 MINGW64 ~/Desktop/mca
\$ git init
Initialized empty Git repository in C:/Users/imrd/Desktop/mca/.git/

4.config your user name and email

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (master) \$ git config --global user.name "mca-1"

5.if already exist replace

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (master) \$ git config --global --replace-all user.email "umargd123@gmail.com"

6.verify your email address according to github email

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (master) \$ git config --global user.email umargd123@gmail.com

7.create your file

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (master) \$ touch f1.txt

8.edit created file write something

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (master) \$ notepad f1.txt

9.add file to staging area

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (master) \$ git add f1.txt

10.commit changes

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (master) \$ git commit -m"fist" [master (root-commit) 444a9ea] fist 1 file changed, 1 insertion(+) create mode 100644 f1.txt

11.create new branch

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (master) \$ git branch mca

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (master) \$ git branch * master mca

12.switch to your branch

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (master)

\$ git checkout mca Switched to branch 'mca'

13.check git status

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (mca)

\$ git status
On branch mca
nothing to commit, working tree clean

14.check git log

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (mca)

\$ git log -v

commit 444a9eaff3d7acf01782fef5dcf9f50bc6721b98 (HEAD -> mca, master)

Author: mca-1 <umargd123@gmail.com> Date: Wed Jun 29 09:37:31 2022 +0530

fist

15.generate SSH key

// find commands on github setting

// copy paste the commands

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (mca)

\$ ssh-keygen -t ed25519 -C "umargd123@gmail.com"

Generating public/private ed25519 key pair.

Enter file in which to save the key (/c/Users/imrd/.ssh/id_ed25519):

Created directory '/c/Users/imrd/.ssh'.

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /c/Users/imrd/.ssh/id_ed25519

Your public key has been saved in /c/Users/imrd/.ssh/id_ed25519.pub

The key fingerprint is:

SHA256:RIrGSkh0RjDvHdTXtGKvUXMW0r/LBnud8EdoWop3kH0 umargd123@gmail.com

The key's randomart image is:

```
+--[ED25519 256]--+
|.=0+ ... oo.. |
|..=... + ..o.. |
|...+.. oo + o. |
|... o. ... + + ..|
| ... S... o ..|
| o oo=.E|
| ... **o+|
| ... +..Bo|
```

```
| ..o.|
+----[SHA256]----+
imrd@imrdcomp36 MINGW64 ~/Desktop/mca (mca)
$ eval "$(ssh-agent -s)"
Agent pid 1210
imrd@imrdcomp36 MINGW64 ~/Desktop/mca (mca)
$ ssh-add ~/.ssh/id_ed25519
```

Identity added: /c/Users/imrd/.ssh/id ed25519 (umargd123@gmail.com)

16.copy SSH key and paste to generate new key

```
imrd@imrdcomp36 MINGW64 ~/Desktop/mca (mca) $ clip < ~/.ssh/id_ed25519.pub
```

17.create new repository and copy paste the commands

```
imrd@imrdcomp36 MINGW64 ~/Desktop/mca (mca) $ git remote add origin https://github.com/Umarkhan7312/mca-1.git
```

18.push changes to git account

// verify branch name before push operation

```
imrd@imrdcomp36 MINGW64 ~/Desktop/mca (mca)
```

\$ git push -u origin mca Enumerating objects: 3, done. Counting objects: 100% (3/3), done.

Writing objects: 100% (3/3), 208 bytes | 208.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 To https://github.com/Umarkhan7312/mca-1.git
* [new branch] mca -> mca

branch 'mca' set up to track 'origin/mca'.

19.perform pull operation using branch name

```
imrd@imrdcomp36 MINGW64 ~/Desktop/mca (mca) $ git pull origin mca
From https://github.com/Umarkhan7312/mca-1
* branch mca -> FETCH_HEAD
Already up to date.
```

20.perform pull operation using file path

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (mca)

\$ git pull https://github.com/Umarkhan7312/mca-1.git

remote: Enumerating objects: 5, done. remote: Counting objects: 100% (5/5), done.

remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 Unpacking objects: 100% (3/3), 621 bytes | 4.00 KiB/s, done.

From https://github.com/Umarkhan7312/mca-1 * branch HEAD -> FETCH_HEAD

Updating 444a9ea..7e38374

Fast-forward f1.txt | 3 ++-

1 file changed, 2 insertions(+), 1 deletion(-)

21.verify changes

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (mca)

\$ notepad f1.txt

22.clone git repository

imrd@imrdcomp36 MINGW64 ~/Desktop/mca (mca)

\$ git clone https://github.com/Umarkhan7312/mca-1.git

Cloning into 'mca-1'...

remote: Enumerating objects: 6, done.

remote: Counting objects: 100% (6/6), done. remote: Compressing objects: 100% (2/2), done.

remote: Total 6 (delta 0), reused 3 (delta 0), pack-reused 0

Receiving objects: 100% (6/6), done.