Experiment No. 1.1

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Branch: MCA – CCD   **Section/Group:** MCD-1/ Grp A

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Subject Name: DevOps Process Automation Lab   **Subject Code:** 22CAP-745

1. Aim/Overview of the practical:

a) Create a python file named as your UID (eg.22MCC20001.py) with some code inside it on a Local Repository named as your UID (eg. 22MCC20001). Push this file on Remote Repo.

(b) Create another Local Repository named as your name (eg. ABC) and pull the files from Remote Repo in it. After this, create a new file in new Local Repo i.e. ABC and push it to Remote Repo. Again pull the files on old Local Repo i.e. 22MCC20001.

(c) At last, visit Remote Repo and commit some changes in a file created i.e. 22MCC20001.py and pull the file again in new Local Repo i.e. ABC. Check whether the changes are existing in file in Local Repo or not.

2. Code for practical:

A)

- Open command prompt or git bash.
- Create a folder using command ***mkdir 22MCC20177***

```
[11:47]  Shell
 F:\worksheet sem 3\devops\Practical
> mkdir 22MCC20177

    Directory: F:\worksheet sem 3\devops\Practical

Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
d----         14-08-2023 11:48 AM                22MCC20177
```

- Change directory using ***cd 22MCC20177***

```
[11:48]  Shell
 F:\worksheet sem 3\devops\Practical
> cd .\22MCC20177\
```

- *Make a new 22MCC20177.py file.*

```
[11:48]  Shell
 F:\worksheet sem 3\devops\Practical\22MCC20177
> echo "print('Hello from 22MCC20177')" > 22MCC20177.py
```

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- Initialize git using ***git init***.

```
[11:49]  Shell
 F:\worksheet sem 3\devops\Practical\22MCC20177
> git init
Initialized empty Git repository in F:/worksheet sem 3/devops/Practical/22MCC20177/.git/
```

- Now create a new main branch using ***git branch -M main***
- Check ***git status*** after that add file using ***git add 22MCC20177.py***
- After that, again check status of git.
- Commit changes using ***git commit -m "Message"***. • Add username and email on git using

```
[11:49]  Shell ⎇master ⌀ ?1
 F:\worksheet sem 3\devops\Practical\22MCC20177
> git add .\22MCC20177.py

[11:52]  Shell ⎇master ⌀ +1
 F:\worksheet sem 3\devops\Practical\22MCC20177
> git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   22MCC20177.py


[11:52]  Shell ⎇master ⌀ +1
 F:\worksheet sem 3\devops\Practical\22MCC20177
> git commit -m "Add 22MCC20177.py"
[master (root-commit) 91d1e84] Add 22MCC20177.py
 1 file changed, 1 insertion(+)
 create mode 100644 22MCC20177.py
```

- Open ***Github.com > Repositories > New***

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?
Import a repository.

Required fields are marked with an asterisk (*).

Repository template

No template ▾

Start your repository with a template repository's contents.

Owner *   **Repository name ***

khushalGrover ▾ / 22MCC20177

✓ 22MCC20177 is available.

Great repository names are short and memorable. Need inspiration? How about fuzzy-waddle ?

- Connect remote repo using **git remote add origin <repo_link>**

```
[11:52] ■ Shell ⎇master ≠
■ F:\worksheet sem 3\devops\Practical\22MCC20177
〉 git remote add origin https://github.com/khushalGrover/22MCC20040.git

[11:56] ■ Shell ∩ ⎇master ≠
■ F:\worksheet sem 3\devops\Practical\22MCC20177
〉 git remote add origin https://github.com/GauravKumar1502/22MCC20177.git
```

- Now push local repo to remote repo using **git push -u origin main**.

```
〉 git push -fu origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 263 bytes | 263.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/khushalGrover/22MCC20040.git
 + 91d1e84 ... 67d9beb main → main (forced update)
branch 'main' set up to track 'origin/main'.
```

B)

- Create another folder using **mkdir Khushal**
- Initialize git by using command **git init**
- Add remote repo **git remote add origin** https://github.com/khushalgrover/22MCC20177.git
- Now pull from remote repo using **git pull origin main**
- Now create a second file and add it on git.
- Commit changes to local repo.

```
[12:04] ■ Shell
■ F:\worksheet sem 3\devops\Practical
〉 mkdir GauravKumar

    Directory: F:\worksheet sem 3\devops\Practical

Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
d----         14-08-2023 12:05 PM                 GauravKumar
```

```
[12:05]  Shell
 F:\worksheet sem 3\devops\Practical
> cd .\GauravKumar\

[12:05]  Shell
 F:\worksheet sem 3\devops\Practical\GauravKumar
> git init
Initialized empty Git repository in F:/worksheet sem 3/devops/Practical/GauravKumar/.git/

[12:06]  Shell master ≠
 F:\worksheet sem 3\devops\Practical\GauravKumar
> git remote add origin https://github.com/GauravKumar1502/22MCC20177.git
```

```
[12:07]  Shell  master ≠
 F:\worksheet sem 3\devops\Practical\GauravKumar
> git branch -M main
```

```
[12:08]  Shell  main ≠
 F:\worksheet sem 3\devops\Practical\GauravKumar
> git pull origin main
From https://github.com/khushalGrover/22MCC20040
 * branch            main        → FETCH_HEAD
```

- Now, push changes to remote repo using ***git push -u origin master***

```
[12:08]  Shell  main ≠
 F:\worksheet sem 3\devops\Practical\GauravKumar
> echo "print('Hello from Gaurav Kumar')" > GauravKumar.py

[12:10]  Shell  main ≠  ?1
 F:\worksheet sem 3\devops\Practical\GauravKumar
> git add .\GauravKumar.py

[12:10]  Shell  main ≠  +1
 F:\worksheet sem 3\devops\Practical\GauravKumar
> git commit -m "Add GauravKumar.py"
[main 47ff1fa] Add GauravKumar.py
 1 file changed, 1 insertion(+)
 create mode 100644 GauravKumar.py

[12:10]  Shell  main ≠
 F:\worksheet sem 3\devops\Practical\GauravKumar
> git push -fu origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 329 bytes | 329.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/khushalGrover/22MCC20040.git
   67d9beb..47ff1fa  main → main
branch 'main' set up to track 'origin/main'.
```
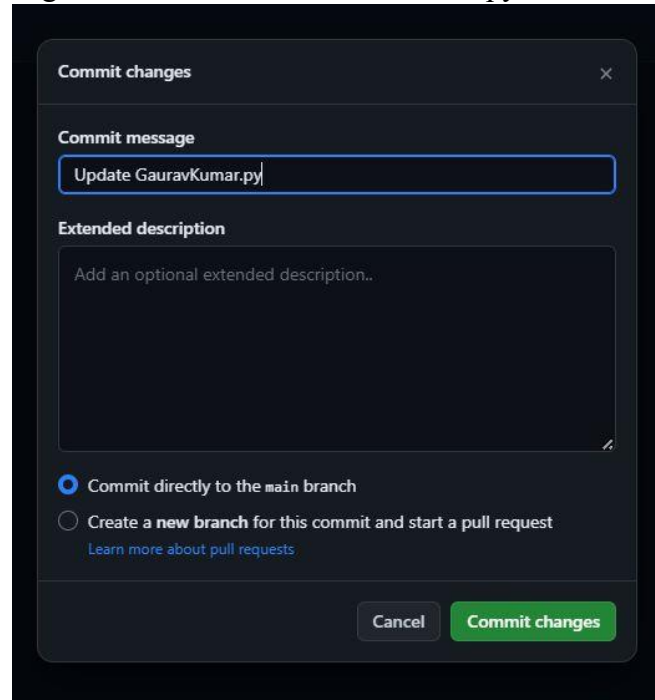
C)

- Open GitHub and make changes in first file i.e. KhushalGrover.py

-
- Go to second local repo and pull the file.
- Changes has been made in the file present in local repo.

```
[12:18] ▣ Shell ↻ ⑂main ≡
■ F:\worksheet sem 3\devops\Practical\GauravKumar
❯ git pull
remote: Enumerating objects: 11, done.
remote: Counting objects: 100% (11/11), done.
remote: Compressing objects: 100% (8/8), done.
remote: Total 9 (delta 1), reused 3 (delta 0), pack-reused 0
Unpacking objects: 100% (9/9), 1.73 KiB | 7.00 KiB/s, done.
From https://github.com/khushalGrover/22MCC20040
   47ff1fa..43f6279  main           → origin/main
Updating 47ff1fa..43f6279
Fast-forward
 GauravKumar.py   | 1 +
 KhushalGrover.py | 2 ++
 2 files changed, 3 insertions(+)
 create mode 100644 KhushalGrover.py

[12:18] ▣ Shell ↻ ⑂main ≡
■ F:\worksheet sem 3\devops\Practical\GauravKumar
❯ cat .\GauravKumar.py
print('Hello from Gaurav Kumar')
print('DevOps Automation Lab')
```