Assignment 1

1

    A. Basic usage using the CLI
        i.   Setup a Local Repository

```
admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1
$ git init
Initialized empty Git repository in C:/Users/admin/Desktop/proj1/.git/
```

        ii.   Setup a Remote Repository

```
admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (master)
$ git remote add origin https://github.com/agr-shubham/proj1.git
```

        iii.   Create local branches

```
admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (master)
$ git branch Feature

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (master)
$ git branch Dev

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (master)
$ git branch QA

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (master)
$ git branch Delivery
```

        iv.   Create remote branches

```
admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Feature)
$ git push --set-upstream origin Feature
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'Feature' on GitHub by visiting:
remote:      https://github.com/agr-shubham/proj1/pull/new/Feature
remote:
To https://github.com/agr-shubham/proj1.git
 * [new branch]      Feature -> Feature
Branch 'Feature' set up to track remote branch 'Feature' from 'origin'.

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Feature)
$ git push --set-upstream origin QA
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'QA' on GitHub by visiting:
remote:      https://github.com/agr-shubham/proj1/pull/new/QA
remote:
To https://github.com/agr-shubham/proj1.git
 * [new branch]      QA -> QA
Branch 'QA' set up to track remote branch 'QA' from 'origin'.

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Feature)
$ git push --set-upstream 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/agr-shubham/proj1/pull/new/Dev
remote:
To https://github.com/agr-shubham/proj1.git
 * [new branch]      Dev -> Dev
Branch 'Dev' set up to track remote branch 'Dev' from 'origin'.

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Feature)
$ git push --set-upstream origin Delivery
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'Delivery' on GitHub by visiting:
remote:      https://github.com/agr-shubham/proj1/pull/new/Delivery
remote:
To https://github.com/agr-shubham/proj1.git
 * [new branch]      Delivery -> Delivery
Branch 'Delivery' set up to track remote branch 'Delivery' from 'origin'.
```

        v.   Making changes
                Added a text file in local directory

vi. Check in, stage, commit, push

```
admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (master)
$ git add .

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (master)
$ git status
On branch master

No commits yet

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


admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (master)
$ git commit -m "First"
[master (root-commit) 4313d25] First
 1 file changed, 1 insertion(+)
 create mode 100644 sdf.txt
```

vii. Promote code from featured branch to Dev. Branch using pull request

```
admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Feature)
$ git status
On branch Feature
Your branch is up to date with 'origin/Feature'.

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:   sdf.txt

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

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Feature)
$ git add .

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Feature)
$ git commit -m "Change made in txt"
[Feature 61ee39a] Change made in txt
 1 file changed, 1 insertion(+), 1 deletion(-)

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Feature)
$ git push origin Feature
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Writing objects: 100% (3/3), 257 bytes | 257.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/agr-shubham/proj1.git
   4313d25..61ee39a  Feature -> Feature

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Feature)
$ git checkout Dev
Switched to branch 'Dev'
Your branch is up to date with 'origin/Dev'.

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Dev)
$ git merge Feature
Updating 4313d25..61ee39a
Fast-forward
 sdf.txt | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Dev)
$ git commit -m "add Feature"
On branch Dev
Your branch is ahead of 'origin/Dev' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
```

```
admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Dev)
$ git push
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/agr-shubham/proj1.git
   4313d25..61ee39a  Dev -> Dev
```

viii.   Checkout the latest code from remote branch to local branch

```
admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Dev)
$ git pull
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), 637 bytes | 4.00 KiB/s, done.
From https://github.com/agr-shubham/proj1
   61ee39a..721a61a  Dev          -> origin/Dev
Updating 61ee39a..721a61a
Fast-forward
 sdf.txt | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)

admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Dev)
$ git diff Feature
diff --git a/sdf.txt b/sdf.txt
index 62d18b6..dac67c6 100644
--- a/sdf.txt
+++ b/sdf.txt
@@ -1 +1 @@
-safasfadfasd
\ No newline at end of file
+safasfadfasdssadasdasdas
```

ix.   Checkout vs pull

Checkout changes the current branch. Pull downloads the new commits from remote to local

x.   Merge

```
admin@DESKTOP-VU4JN5G MINGW64 ~/Desktop/proj1 (Dev)
$ git merge Feature
Updating 4313d25..61ee39a
Fast-forward
 sdf.txt | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)
```