Registration No.: MSDSF23M016

Submitted by: Sania Khalid

Assignment: 02

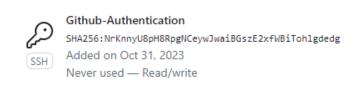
1. Set up your GitHub account and set up SSH key authentication.

```
Sania@DESKTOP-ROFG1DB MINGW64 ~
$ ssh-keygen -t ed25519 -C saniakhalidcs004@gmail.com
Generating public/private ed25519 key pair.
Enter file in which to save the key (/c/Users/Sania/.ssh/id_ed25519):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/Sania/.ssh/id_ed25519
Your public key has been saved in /c/Users/Sania/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:NrKnnyU8pH8RpgNCeywJwaiBGszE2xfWBiTohlgdedg saniakhalidcs004@gmail.com
The key's randomart image is:
 --[ED25519 256]--+
 *+0+0B0
==+ *oEo
 *+00.=0
     .+..So .
       Во..
    -[SHA256]----+
 ania@DESKTOP-ROFG1DB MINGW64 ~
```

SSH keys

This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.

Authentication Keys



2. Create a repository named DevOps-A2.

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 (*).

Owner * Repository name *

DevOops-A2

DevOops-A2 is available.

Great repository names are short and memorable. Need inspiration? How about glowing-computing-machine?

Description (optional)

Public

Anyone on the internet can see this repository. You choose who can commit.

Private
You choose who can see and commit to this repository.

3. Clone the repository to your local computer. Add a Python program that can scrap any web page from the Internet and output clean text on the console. If scrapping is new for you, learn it quickly for the task. Commit to this change. Show this screenshot in your submission.

```
Sania@DESKTOP-ROFG1DB MINGW64 ~

$ git clone https://github.com/saniakhalid1/DevOps-A2.git
Cloning into 'DevOps-A2'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.

Sania@DESKTOP-ROFG1DB MINGW64 ~

$
```

```
Sania@DESKTOP-ROFGIDB MINGW64 ~/OneDrive/Desktop

S git clone https://github.com/saniakhalid1/DevOps-A2.git
Cloning into 'DevOps-A2'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.

Sania@DESKTOP-ROFGIDB MINGW64 ~/OneDrive/Desktop

S cd DevOps-A2

Sania@DESKTOP-ROFGIDB MINGW64 ~/OneDrive/Desktop/DevOps-A2 (main)

S git init
Reinitialized existing Git repository in C:/Users/Sania/OneDrive/Desktop/DevOps-A2/.git/

Sania@DESKTOP-ROFGIDB MINGW64 ~/OneDrive/Desktop/DevOps-A2 (main)

S git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
(use "git add file>..." to include in what will be committed)
DevOps-A2.jpynb

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

```
Sania@DESKTOP-ROFGIDB MINGW64 ~/OneDrive/Desktop/DevOps-A2 (main)
$ git add DevOps-A2' did not match any files

Sania@DESKTOP-ROFGIDB MINGW64 ~/OneDrive/Desktop/DevOps-A2 (main)
$ git add DevOps-A2.ipynb

warning: in the working copy of 'DevOps-A2.ipynb', LF will be replaced by CRLF the next time Git touches it

Sania@DESKTOP-ROFGIDB MINGW64 ~/OneDrive/Desktop/DevOps-A2 (main)
$ git add DevOps-A2.ipynb

Sania@DESKTOP-ROFGIDB MINGW64 ~/OneDrive/Desktop/DevOps-A2 (main)
$ git commit -m "This is initial Commit"

[main b2cba5f] This is initial Commit
1 file changed, 705 insertions(+)
create mode 100644 DevOps-A2.ipynb
```

```
Sania@DESKTOP-ROFG1DB MINGW64 ~/OneDrive/Desktop/DevOps-A2 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

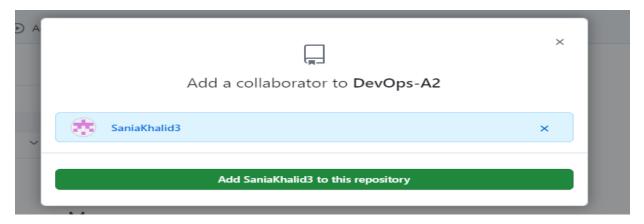
Sania@DESKTOP-ROFG1DB MINGW64 ~/OneDrive/Desktop/DevOps-A2 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

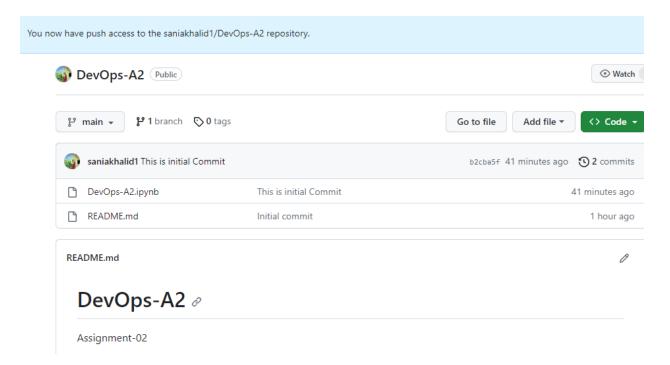
nothing to commit, working tree clean
```

```
Sania@DESKTOP-ROFG1DB MINGW64 ~/OneDrive/Desktop/DevOps-A2 (main)
$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 2.97 KiB | 2.97 MiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/saniakhalid1/DevOps-A2.git
    755980c..b2cba5f main -> main

Sania@DESKTOP-ROFG1DB MINGW64 ~/OneDrive/Desktop/DevOps-A2 (main)
$ |
```

4. Invite another user to your repository and assign him to change the code to save the output to the file.





5. You need to update the code by having proper comments. This way, you will work on the version outputting in the console while other users work to change the output from the console to a file. Let him first commit, and then you commit. This way, once you commit, git will try to resolve the conflict. Show this screenshot in your submission

```
Sania@DESKTOP-ROFGIDB MINGW64 ~/OneDrive/Desktop/DevOps-A2 (main)

$ git clone git@github.com:saniakhalid1/DevOps-A2.git

Cloning into 'DevOps-A2'...

remote: Enumerating objects: 6, done.

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

remote: Compressing objects: 100% (4/4), done.

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

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

Sania@DESKTOP-ROFGIDB MINGW64 ~/OneDrive/Desktop/DevOps-A2 (main)

$ git checkout -b NewMain

Switched to a new branch 'NewMain'
```

```
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git add .
warning: in the working copy of 'DevOps-A2.ipynb', LF will be replaced by CRLF the next time Git touches it
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2>
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git add .
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git commit -m "Added and updated some piece of code"
[main d6a55db] Added and updated some piece of code
 1 file changed, 5 insertions(+), 16 deletions(-)
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git push origin main
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), 424 bytes | 212.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/saniakhalid1/DevOps-A2.git
 b2cba5f..d6a55db main -> main
```

```
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git add .

warning: in the working copy of 'DevOps-A2.ipynb', LF will be replaced by CRLF the next time Git touches it
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2>
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2>
git add .

PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git commit -m "Added and updated some piece of code"

[main d6a55db] Added and updated some piece of code
1 file changed, 5 insertions(+), 16 deletions(-)
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git push origin main
Enumerating objects: 5, done.

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

Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
```

6. Now check out the version of the code you committed in step 3, create a new branch, and call it QA. Add a text file mentioning random QA guidelines and commit to this branch.

```
PS <u>C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2</u>> git branch -a
 remotes/origin/HEAD -> origin/main
 remotes/origin/main
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git checkout main
Already on 'main'
      DevOps-A2.ipynb
Your branch is up to date with 'origin/main'.
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git checkout -b QA
Switched to a new branch 'OA'
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git add test.txt
fatal: pathspec 'test.txt' did not match any files
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git add .
warning: in the working copy of 'DevOps-A2.ipynb', LF will be replaced by CRLF the next time Git touches it
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2>
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> ls
 PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> ls
     Directory: C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2
                      LastWriteTime
                                           Length Name
 -a---- 10/31/2023 8:55 AM
                                            14313 DevOps-A2.ipynb
               10/31/2023 8:48 AM
                                                28 README.md
 PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git commit -m "Added text file"
  [QA 8041792] Added text file
  1 file changed, 1 insertion(+), 1 deletion(-)
 PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git add test.txt
 fatal: pathspec 'test.txt' did not match any files
 PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git add .
```

7. Merge the QA branch to the master/main branch.

```
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git merge QA
Updating d6a55db..8041792
Fast-forward
DevOps-A2.ipynb | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)
PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git commit -m "Merge QA Branch here"
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
```

PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2> git push origin main

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), 342 bytes | 114.00 KiB/s, done.

Total 3 (delta 1), reused 0 (delta 0), pack-reused 0

remote: Resolving deltas: 100% (1/1), completed with 1 local object.

To https://github.com/saniakhalid1/DevOps-A2.git

d6a55db..8041792 main -> main

PS C:\Users\Sania\OneDrive\Documents\GitHub\DevOps-A2>