Ex1 - Gitting Started

Please read the instructions carefully before completing this exercise.

In this exercise we are going to cover the initial installation and configuration of Git on your local computer. After installation, you will create your first local repository, add files to it and make an initial commit.

Please submit your answer as a PDF file. For each question, include in your answer the question number, the command(s) you used to solve the question, and the output of the command(s) (text or screenshot).

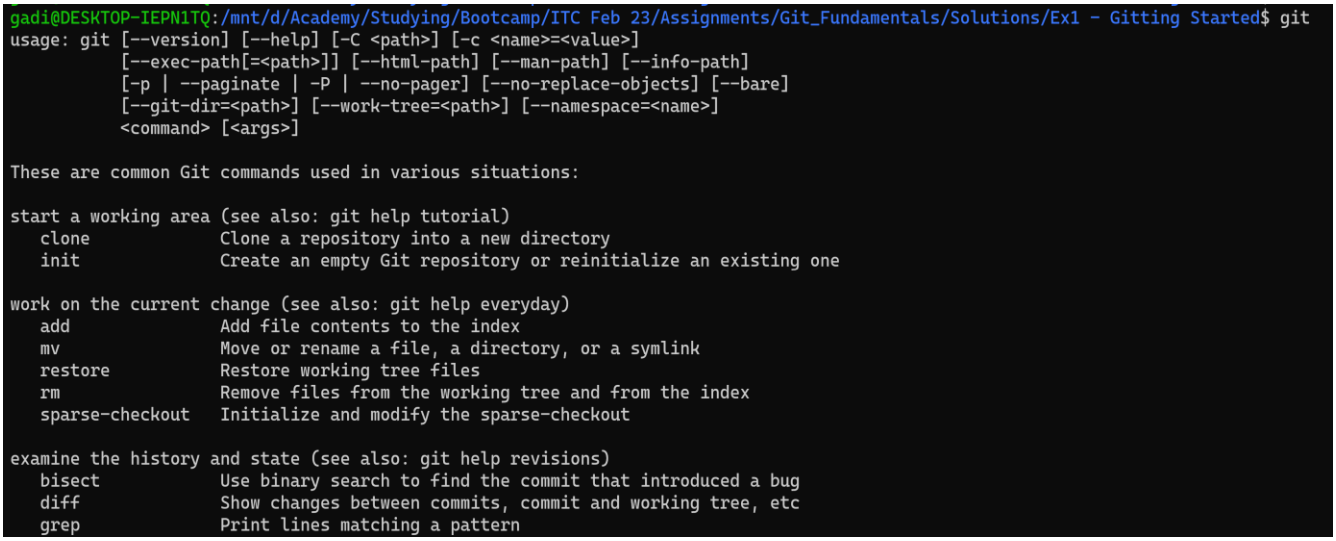
Part 1: Configuration

Questions:

1. Make sure that Git is installed on your computer. In your answer, write your operating system (e.g. Windows 10) and the version of Git installed on your computer.

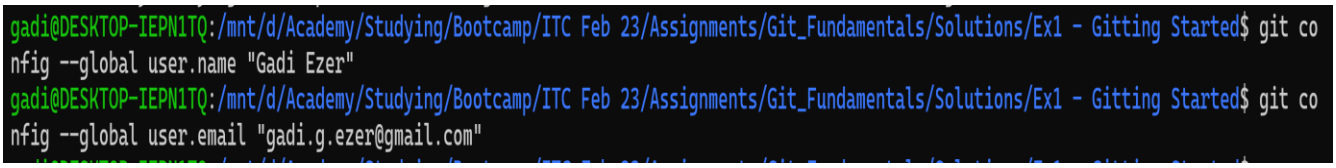
```
gadi@DESKTOP-IEPN1TQ:/mnt/c/Windows/System32$ where git
where: command not found
gadi@DESKTOP-IEPN1TQ:/mnt/c/Windows/System32$ cat /etc/os-release
NAME="Ubuntu"
VERSION="20.04.5 LTS (Focal Fossa)"
ID=ubuntu
ID_LIKE=debian
PRETTY_NAME="Ubuntu 20.04.5 LTS"
VERSION_ID="20.04"
HOME_URL="https://www.ubuntu.com/"
SUPPORT_URL="https://help.ubuntu.com/"
BUG_REPORT_URL="https://bugs.launchpad.net/ubuntu/"
PRIVACY_POLICY_URL="https://www.ubuntu.com/legal/terms-and-policies/privacy-policy"
VERSION_CODENAME=focal
UBUNTU_CODENAME=focal
gadi@DESKTOP-IEPN1TQ:/mnt/c/Windows/System32$ git --version
git version 2.25.1
```

2. For all of the Git exercises, we will be using Git via the Command Line Interface (CLI). Open the Git CLI using the method of your choice, and document what you did to open it in your answer to this question.

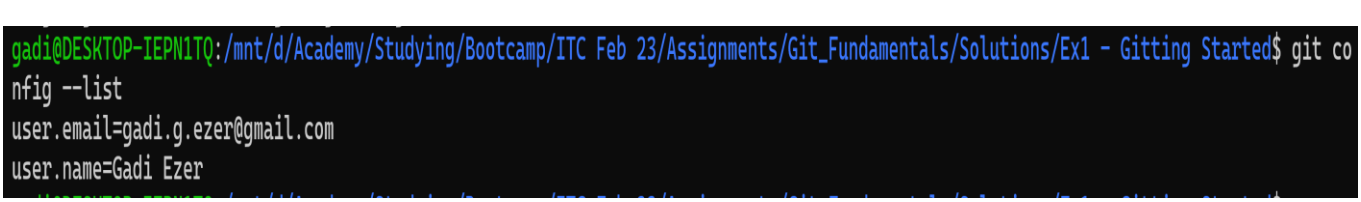


3. Using a shell command, print out the current working directory. Notice that every interaction with Git is dependent upon the working directory you're in (besides general configurations).

4. In the CLI, define your name and email to be used on all of your commits.



5. Print out the contents of your Git configuration file.



Part 2: My First Repository

Questions:

6. Initialize your first Git repository.

```
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ git in
it
Initialized empty Git repository in /mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting
Started/.git/
```

7. Display the files in your working directory, including hidden files. What do you see there?

```
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ ls -a
.  ..  .git
```

8. Using the CLI, create and save a new file called `hello_world.txt` in your working directory containing the following dummy text:

   Lorem ipsum dolor sit amet,
   consectetuer adipiscing elit.
   Aenean commodo ligula eget dolor.
   Aenean massa.
   Cum sociis natoque penatibus et magnis dis parturient montes,
   nascetur ridiculus mus.
   Donec quam felis, ultricies nec, pellentesque eu, pretium quis, sem.
   Nulla consequat massa quis enim.
   Donec pede justo, fringilla vel, aliquet nec, vulputate eget, arcu.

```
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ vim he
llo_world.txt
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ ls
hello_world.txt
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ cat he
llo_world.txt
Lorem ipsum dolor sit amet, consectetuer adipiscing elit.
Aenean commodo ligula eget dolor.
Aenean massa.
Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.
Donec quam felis, ultricies nec, pellentesque eu, pretium quis, sem.
Nulla consequat massa quis enim.
Donec pede justo, fringilla vel, aliquet nec, vulputate eget, arcu.
```

9. Use a Git command to inspect the status of your repository.

```
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ git st
atus
On branch master

No commits yet

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

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

10. We can see that the file we created is not yet added to our repository. Using the CLI, add the specific file to your repository. Validate again with the same inspection command you used before.

```
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ git ad
d hello_world.txt
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ git st
atus
On branch master

No commits yet

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

11. The file should be staged right now but not committed yet. What is the difference between a staged file and a committed file?

A stage file is a file that is to be shared and it's editable while a committed file is already capsuled and therefore can not be changed.

Stagging allows adding more than one file in the list of files to be committed (i.e. using the 'add' command to stage files for commit). The 'commit' command commits all staged files in a single command

12. Remove your file from the staging area. Inspect your repository.

```
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ git re
set hello_world.txt
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ git st
atus
On branch master

No commits yet

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

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

13. Create another file in your working directory with a name of your choice and some creative content. Use a single command to add all the files in your working directory to your repository. Inspect your repository.

```
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ cp hel
lo_world.txt copy_hello_world.txt
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ ls
copy_hello_world.txt  hello_world.txt
```

```
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ git ad
d -A
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ git st
atus
On branch master

No commits yet

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

14. Use the CLI to commit the files you added.

```
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ git co
mmit -m "1st commit"
[master (root-commit) 55cad8c] 1st commit
 2 files changed, 16 insertions(+)
 create mode 100644 copy_hello_world.txt
 create mode 100644 hello_world.txt
```

15. Use a Git command to inspect your new commit. Document the output in addition to the command.

```
gadi@DESKTOP-IEPN1TQ:/mnt/d/Academy/Studying/Bootcamp/ITC Feb 23/Assignments/Git_Fundamentals/Solutions/Ex1 - Gitting Started$ git lo
g --reflog --graph
* commit 55cad8c4fd148d087dc6a5f8a11ed5be2b5a76ff (HEAD -> master)
  Author: Gadi Ezer <gadi.g.ezer@gmail.com>
  Date:   Thu Mar 9 15:39:59 2023 +0200

      1st commit
```

Good luck!