PW ASSIGNMENT 2 GIT and GITHUB

Q.1 How to check whether git is available to your system or not?
Ans. First we have to open our git bash, and run command git –version, if git is installed the version of git will be shown on your system.

```
kumar@LAPTOP-9B6C5HG4 MINGW64 ~ (main)
$ git version
git version 2.39.1.windows.1
```

Q2. How to initialise a new git repository?
Ans. First we have to specify the path where we want to make our repository, using cd command, then we use git init command

```
kumar@LAPTOP-9B6C5HG4 MINGW64 ~/OneDrive/Desktop/JAVA (main)
$ git init
Initialized empty Git repository in C:/Users/kumar/OneDrive/Desktop/JAVA/.git/
```

Q3. How to tell Git about your name and email?
Ans Following commands are used for configuring your name and email.
The Username :- git config --global user.name "<your_username>"
The Email :- git config --global user.email "<your_email>"

Q4. How to add a file to the staging area.
Ans. Using git add command.

```
kumar@LAPTOP-9B6C5HG4 MINGW64 ~/OneDrive/Desktop/JAVA (master)
$ git add pw.java

kumar@LAPTOP-9B6C5HG4 MINGW64 ~/OneDrive/Desktop/JAVA (master)
$ git status
On branch master

No commits yet

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

Q.5 How to remove a file from the staging area?.
Ans using git –rm <File name>

```
kumar@LAPTOP-9B6C5HG4 MINGW64 ~/OneDrive/Desktop/JAVA (master)
$ git rm --cached pw.java
rm 'pw.java'

kumar@LAPTOP-9B6C5HG4 MINGW64 ~/OneDrive/Desktop/JAVA (master)
$ git status
On branch master

No commits yet

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

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

Q.6 How to make a commit?
Ans Using git commit command

Q.6 How to send your changes to a remote repository ?
Ans. Using git push origin main command

```
hp@LAPTOP-3NKORD70 MINGW64 ~/SampleProject (master)
$ git push origin master
Enumerating objects: 8, done.
Counting objects: 100% (8/8), done.
Delta compression using up to 4 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (7/7), 916 bytes | 36.00 KiB/s, done.
Total 7 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/yskumar007/SampleProject.git
   d9382ad..672da20  master -> master
```

Q7. What is the difference between clone and pull?
Ans. Git clone is a command that basically makes a copy of a remote repository on your local computer, whereas The git pull command is used to fetch and download content from a remote repository and immediately update the local repository to match that content. Merging remote upstream changes into your local repository is a common task in Git-based collaboration workflows.