

## Cheat Sheet for Git and GitHub Commands

1. Check Git version:

```
`git --version`
```

2. Configure user name and email globally:

```
'''
```

```
git config --global user.name "Vaibhav Singh"
```

```
git config --global user.email "vaibhav@gmail.com"
```

```
'''
```

3. Initialize a Git repository in a directory:

```
`git init`
```

4. Check the status of files: ``git status``

5. Add all files in the current directory to the staging area: ``git add --all``

6. Commit changes with a message: ``git commit -m "Hello World!"``

- Commit changes directly, skipping the staging area: ``git commit -a -m "Hello World!"``

7. View commit history: ``git log``

8. Create a new branch: ``git branch <branch-name>``

9. Switch to a newly created branch: ``git checkout <branch-name>``

10. Merge a branch into the current branch:

```
'''
```

```
git checkout master # Move to master
```

```
git merge <newly created branch name>
```

```
'''
```

### Git and GitHub Integration:

1. Add a remote repository as the origin: ``git remote add origin <github-repo-url>``

2. Push the master branch to the origin repository and set it as the default remote branch:

```
`git push --set-upstream origin master`
```

3. Fetch updates from the remote repository:

```
`git fetch origin`
```

4. Show differences between local master and origin/master:  
``git diff origin/master``
5. Merge the current branch with origin/master:  
``git merge origin/master``

### **Keeping Your Local Copy Up-to-Date:**

6. Pull changes from a remote repository into the current branch:  
``git pull origin``

### **Git Undo:**

7. Reset the repository to a previous commit (discarding changes after that commit):  
``git reset <hash-key>``
8. Revert a previous commit, keeping the commit history intact:  
``git revert <hash-key>``
9. Amend the latest commit with changes in the staging area:  
``git commit --amend -m "Added lines to README.md"``

These commands cover a wide range of Git and GitHub operations and should help you get started with version control and collaboration on Git projects. Remember to replace placeholders like ``<branch-name>`` and ``<github-repo-url>`` with actual branch names and URLs as needed.