Git Commands Chit sheet

1.Setup in Windows :

– Set User Name

```
$ git config --global user.name "[firstname lastname]"
```

#Sets a name that is identifiable for credit when reviewing version history.

– Set User Email

```
$ git config --global user.email "[valid-email]"
```

#Sets an email address that will be associated with each history marker.

– Set Automatic Command Line Coloring

```
$ git config --global color.ui auto
```

#Enables automatic command line coloring for Git for easy reviewing.

2. Basic Commands :

- Stage & Snapshot

– Show Modified Files

```
$ git status
```

#Displays the state of the working directory and staging area. It shows which files have been modified and which files are staged for the next commit.

– Add File to Next Commit

```
$ git add [file]
```

#Stages changes to the specified file for the next commit. This command adds the current content of the file to the staging area.

– Unstage a File

```
$ git reset [file]
```

#Removes the specified file from the staging area, but leaves its changes in the working directory.

– Show Changes

```
$ git diff
```

#Shows the differences between the working directory and the staging area.

– Show Staged Changes

```
$ git diff --staged
```

#Shows the differences between the staging area and the last commit.

– Commit Changes

```
$ git commit -m "[descriptive message]"
```

#Commits the staged changes with a descriptive message.

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3. Branch & Merge

– List Branches

```
$ git branch
```

#Lists all the branches in your repository. A * will appear next to the currently active branch.

– Create a New Branch

```
$ git branch [branch-name]
```

#Creates a new branch at the current commit.

– Switch to Another Branch

```
$ git checkout [branch-name]
```

#Switches to the specified branch and updates the working directory.

– Merge Branches

```
$ git merge [branch-name]
```

#Merges the specified branch's history into the current branch.

– Show Commit History

```
$ git log
```

#Displays the commit history for the current branch.

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4. Share & Update

– Add a Remote Repository

```
$ git remote add [alias] [url]
```

#Adds a Git URL as an alias.

– Fetch Changes from a Remote Repository

```
$ git fetch [alias]
```

#Fetches all the branches from the specified Git remote.

– Merge Remote Branch into Current Branch

```
$ git merge [alias]/[branch]
```

#Merges a remote branch into the current branch to bring it up to date.

– Push Local Branch to Remote Repository

```
$ git push [alias] [branch]
```

#Transmits local branch commits to the remote repository branch.

– Fetch and Merge Changes from Remote Repository

```
$ git pull
```

#Fetches and merges any commits from the tracking remote branch.
