Basic Git Commands

1 Initial command

- **Explanation**: Initializes a new Git repository in the current directory.
- **Usage**: This command sets up all the necessary files and directories for Git to start tracking changes.
- **Command example**: git init

2 Configuration Commands

2.1 Name configuration

- **Command:** git config --global user.name "name"
- **Explanation**: Sets the global username for Git. This username will be used for all your Git repositories on this machine.
- **Usage**: Replace "name" with your actual GitHub username.
- **Command example**: git config --global user.name "Tom"

2.2 Email configuration

- **Command: git config --global user.email <Email address>**
- **Explanation**: Sets the global email address for Git. This email will be associated with your commits.
- **Usage**: Replace abc@gmail.com with the email linked to your GitHub account.
- **Command example**: git config --global user.email abc@gmail.com

2.3 Proxy configuration (You not need this command if you don't have a proxy)

- **Command: git config --global http.proxy <http://server_IP address :port no>**
- **Command:** git config --global http.proxy <http://server_IP address :port no>
- **Explanation**: Configures Git to use a proxy server for HTTP connections. Useful if you are behind a firewall or need to route Git traffic through a proxy.
- **Usage**: Replace http://192.248.48.9:3128 with your proxy server address if necessary.
- **Command example**: git config --global http.proxy http://192.248.48.9:3128

3 File add Command

- **Command: git add <File_Name>**
- **Explanation**: Adds the file readme.txt to the staging area. Staging prepares the file for inclusion in the next commit.
- **Usage**: Replace the File_name with the name of the file you want to add.
- **Command example**: git add readme.txt

4 Commit Command

- **Command: git commit -m "commit massage"**
- **Explanation**: Commits the changes in the staging area with a descriptive message "Create a file".
- **Usage**: Replace "Create a file" with a brief, meaningful commit message.
- **Command example**: git commit -m "Create a file"

5 Branch Command

- **Command: git branch -M main**
- **Explanation**: Renames the current branch to main. This is commonly done when initializing a new repository to align with modern Git conventions.
- **Usage**: This assumes you are renaming the default branch from master to main.
- **Command example**: git branch -M main

6 Remote Add Command

- **Command: git remote add origin <>**
- **Explanation**: Sets the remote repository named origin with the URL. Assume that, your repository name origin is https://github.com/Abc/test.git. (You can find this from your repository page)
- **Usage**: Replace the URL with your actual repository URL.
- **Command example**: git remote add origin https://github.com/Abc/test.git

7 Push Command

- **Command: git push -u origin main**
- **Explanation**: Pushes the local main branch to the remote repository origin. The -u flag sets origin/main as the upstream branch, so future pushes and pulls can be done without specifying the remote and branch names.
- **Usage**: Ensure you have the necessary permissions to push to the repository.
- **Command example**: git push -u origin main

8 Summary

These commands, when executed in sequence, initialize a new Git repository, configure global settings, add and commit a file, set the branch name to main, set up a remote repository, and push the initial commit to GitHub. Adjust the specifics (username, email, file names, repository URL) according to your actual setup and needs.