

A. SETTING UP SSH KEY (for a secure and passwordless git connection between a local system and remote repo):

All are Terminal commands for Mac (use DOS command prompt for Windows).

1. Creating a SSH key:

```
$ ssh-keygen -t rsa -b 4096 -C "myname@mydomain.com"
```

2. Adding the SSH:

```
$ ssh-add ~/.ssh/id_rsa
```

3. Show and copy the SSH key:

```
$ cat ~/.ssh/id_rsa (to view and copy the key) or
```

```
$ pbcopy < ~/.ssh/id_rsa.pub (to copy the key in the clipboard)
```

```
-----BEGIN OPENSSH PRIVATE KEY-----
```

```
ssh-rsa
```

```
b3BIbnNzaC1rZXktdjEAAAABG5vbmUAAAABbm9uZQAAAAAAAAABAAACFwAAA2gtcnwrfuvwprt  
IEjS
```

```
....
```

```
....
```

```
....
```

```
VWxoUoX2BtFekTHJYFsumkBVMtkYhYBm85aWg00UT5w6hNJlxjwwj0IC2ccgQxkkAAAAUZW1ydWx  
oYXNhbkBnbWFpbC5jb20BAgMEBQYH== mymail@domain.com
```

```
-----END OPENSSH PRIVATE KEY-----
```

4. Go to GitHub.com and sign in. Navigate to Settings > SSH and GPG keys > New SSH key. Copy the key everything from *ssh-rsa* to *mymail@domain.com* and paste in GitHub > Settings > SSH and GPG keys > New SSH key. Title: description for the new key, e.g. *My MacBook Air*. Key: Paste the key into the Key field. Click Add SSH key. Enter your GitHub password.

B. COMMITTING CODE FROM TERMINAL / COMMAND PROMPT:

1. Navigate to local repo folder (myrepo).

```
$ git init (to initialize local empty Git repo folder (myrepo))
```

2. Configure user name and email – as used in GitHub account:

```
git config --global user.email "you@example.com"
```

```
git config --global user.name "Your Name"
```

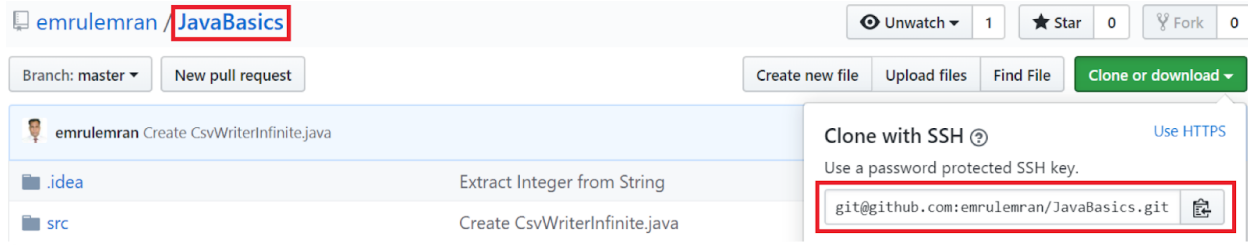
3. Check if user name and email has been configured properly:

```
$ git config --global user.email
```

```
$ git config --global user.name
```

4. Cloning with SSH: Copy GitHub (remote) repo to local. *JavBasics* will be copied to local if we use the highlighted link below.

```
$ git clone git@github.com:emrulemran/JavaBasics.git
```



5. Navigate to JavaBasics folder inside the local repo folder (myrepo):

```
$ cd JavaBasics/
```

6. Check status:

```
$ git status
```

7. Edit, make changes to any file and save inside the local repo folder (myrepo). Besides using IDEs, we can use **vi editor** to modify source codes:

```
$ vi StringToCharArray
i to enter Insert mode
Esc
:w to enter Write mode and press Enter
:q to quit the vi editor
```

8. Add file modified file:

```
$ git add . ( . or * or specific filename with extension)
```

9. Check status again:

```
$ git status
```

10. To push changed code:

```
$ git push
$ git push -u origin master
```

11. Commit the modified file:

```
$ git commit -m "checking git"
```

Other Git commands:

```
$ git log (to check log of changes made to Git repo)
$ git branch (to check branch status)
$ git checkout -b testbranch (create) (to create a new branch named testbranch)
$ git branch -d tempbranch (to delete a branch name tempbranch)
$ git push --set-upstream origin testbranch (to push code to remote repo named testbranch)
```