1. Open Git Bash
2. Paste the command below, substituting in your GitHub email address to generate keypair

   $ ssh-keygen -t rsa -b 4096 -C your_email@example.com

```
PRAKARAM@L-156172061 MINGW64 ~
 $ ssh-keygen -t rsa -b 4096 -C "prakash.ramamurthy@wipro.com"
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/prakaram/.ssh/id_rsa):
Created directory '/c/Users/prakaram/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/prakaram/.ssh/id_rsa.
Your public key has been saved in /c/Users/prakaram/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:kxPxgIeid8wWRlYcRF/+kvYpXiyR5ZiDzFVDRxspkz0 prakash.ramamurthy@wipro.com
The key's randomart image is:
+---[RSA 4096]----+
|     .oBB.  ..*o+|
|    ..= o= o = Eo|
|   . = o. o o +..|
|  . . =  = o O   |
|   . o  S + X o  |
|         o . * . |
|            o =  |
|           . +   |
|            .    |
+----[SHA256]-----+
```

---

3. RSA keys generated:

```
PRAKARAM@L-156172061 MINGW64 ~
$ dir /c/Users/prakaram/.ssh
id_rsa  id_rsa.pub
```

---

4. Ensure the ssh-agent is running:

```
# start the ssh-agent in the background


PRAKARAM@L-156172061 MINGW64 ~
$ eval $(ssh-agent -s)
Agent pid 169276
```

---

5. Add your SSH private key to the ssh-agent.

```
PRAKARAM@L-156172061 MINGW64 ~
$ ssh-add ~/.ssh/id_rsa
Identity added: /c/Users/prakaram/.ssh/id_rsa (/c/Users/prakaram/.ssh/id_rsa)
```

---

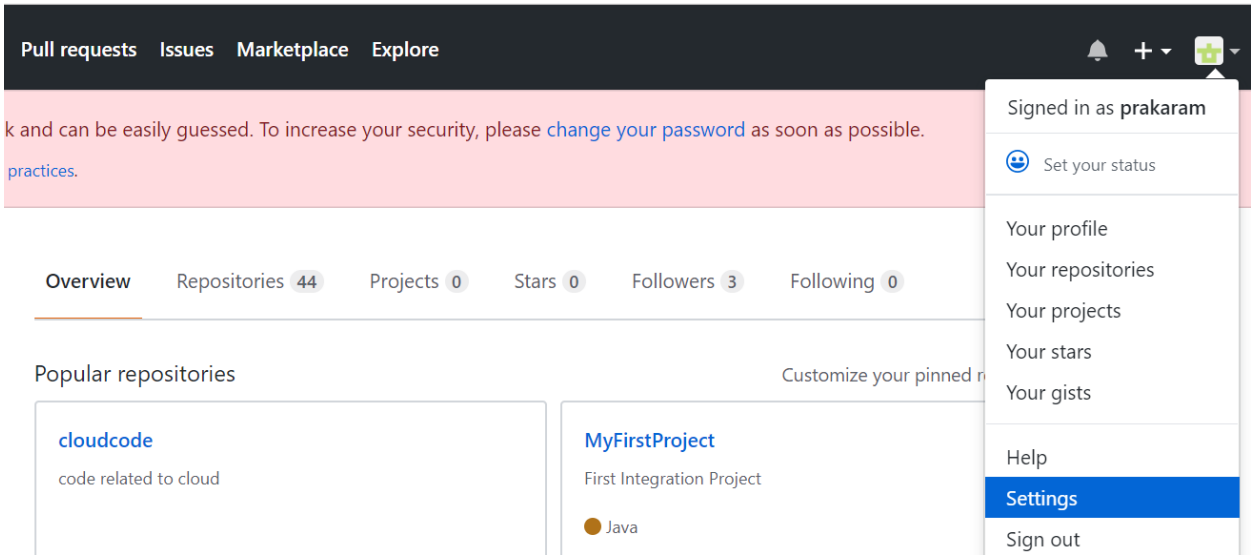
6. To configure your GitHub account to use your new (or existing) SSH key, you'll also need to add it to your GitHub account.

Copy the SSH key to your clipboard.

```
PRAKARAM@L-156172061 MINGW64 ~
$ clip < ~/.ssh/id_rsa.pub
```

---

7. Access Settings in GitHub.



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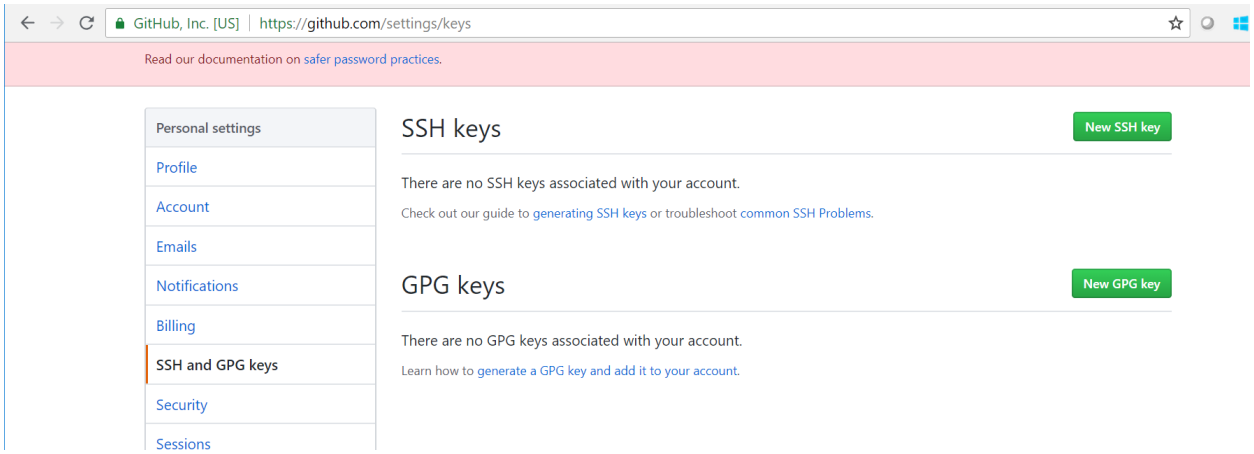
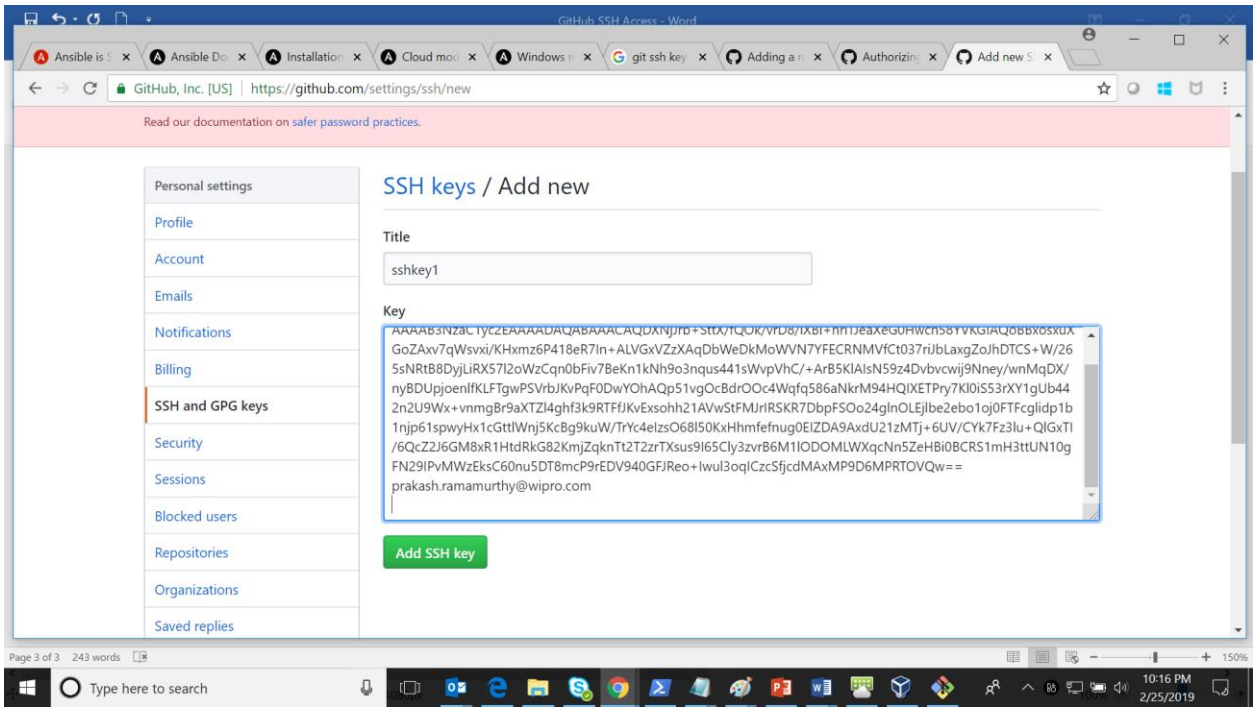
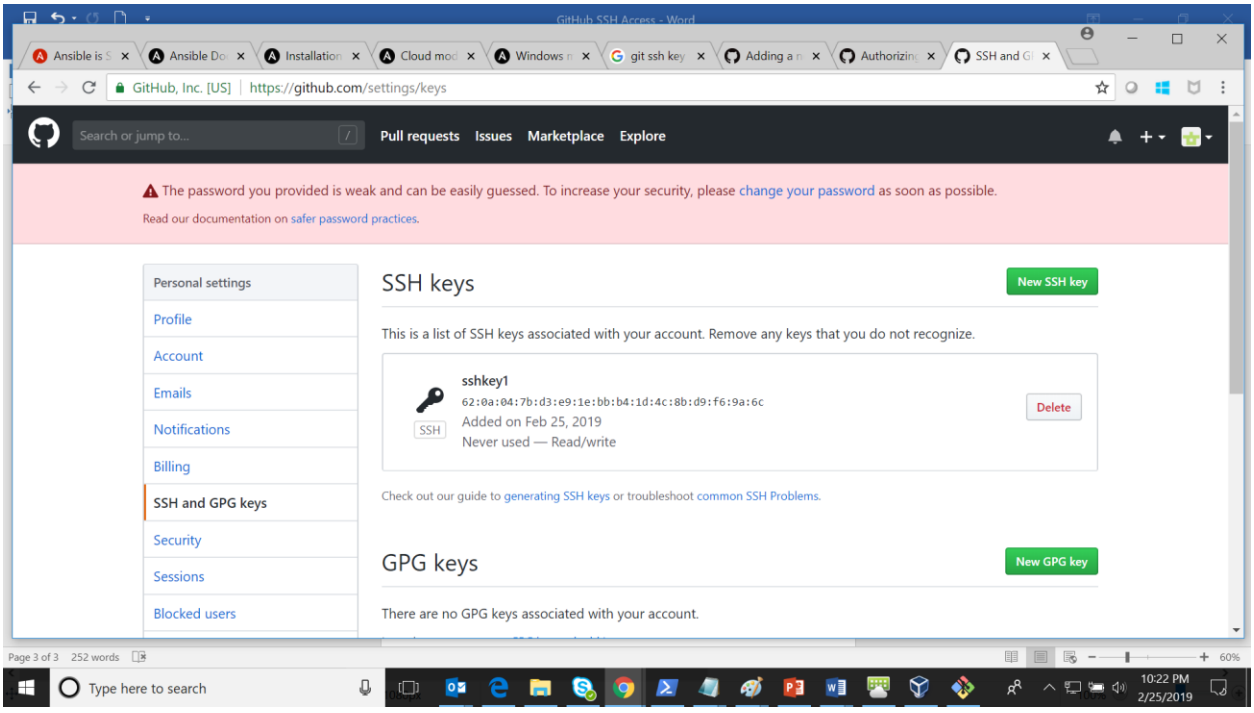
8. Click on “New SSH key”

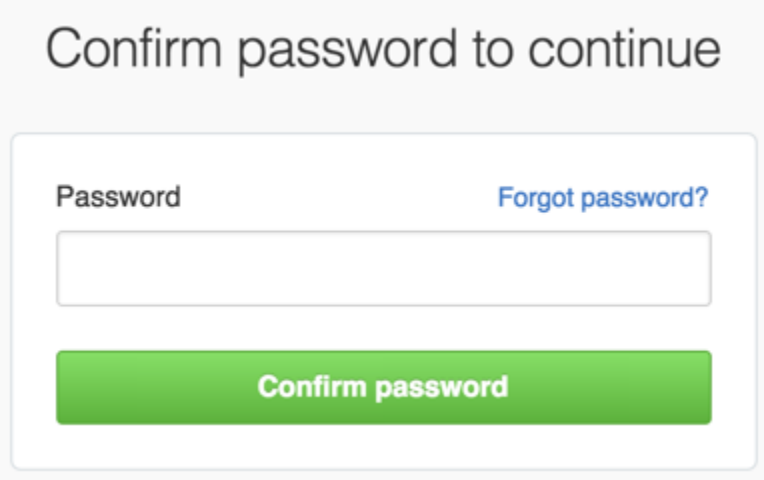


9. Paste the key and click on “Add SSH key”





10. If prompted, confirm your GitHub password.



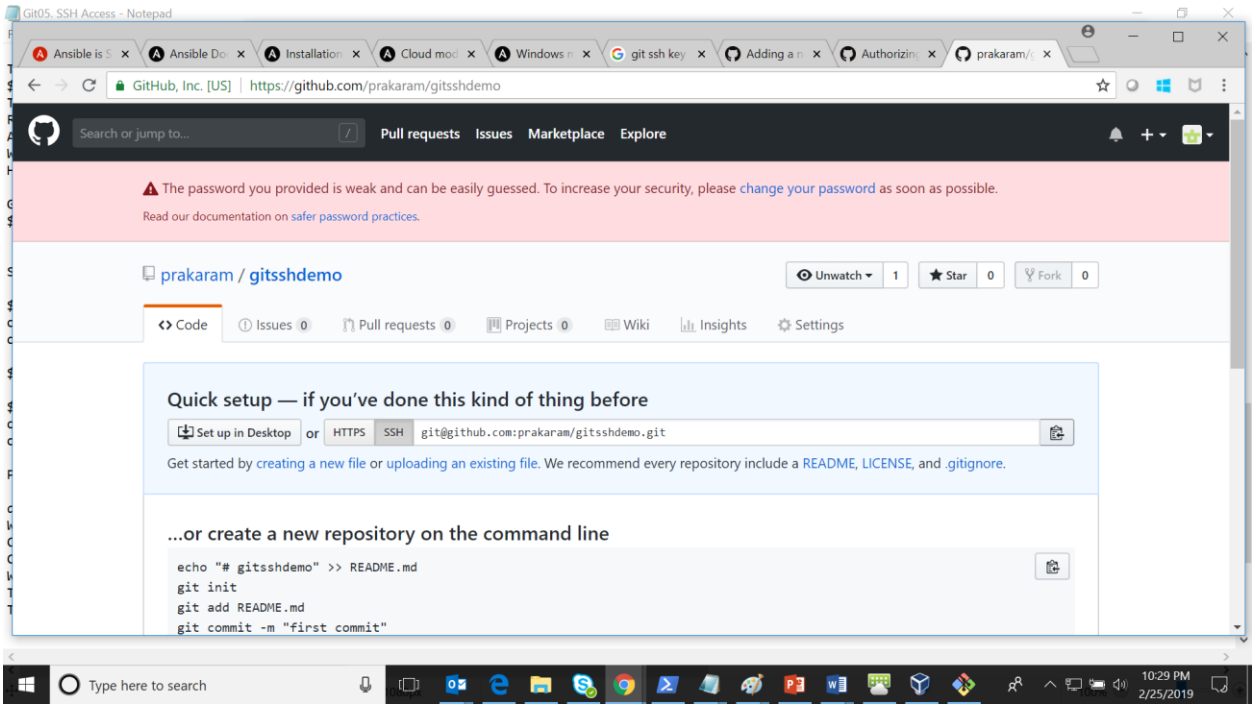
---

11. Verify whether the connection is working

```
PRAKARAM@L-156172061 MINGW64 ~
$ ssh -T git@github.com
Warning: Permanently added the RSA host key for IP address '192.30.253.113' to the
list of known hosts.
Hi prakaram! You've successfully authenticated, but GitHub does not provide shell
access.
```

---

12. Create a new GitHub project and collect ssh url.



```
PS D:\lab\git\gitrtdemo> git remote add sshurl
git@github.com:prakaram/gitsshdemo.git

PS D:\lab\git\gitrtdemo> git remote -v
sshurl  git@github.com:prakaram/gitsshdemo.git (fetch)
sshurl  git@github.com:prakaram/gitsshdemo.git (push)
```

To change url to http you may use the following command.

```
$ git remote set-url origin
https://github.com/prakaram/gitsshdemo.git
```

---

13. Push the code to remote repository:

```
PS D:\lab\git\gitrtdemo> git push sshurl master
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (6/6), 518 bytes | 172.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0)
To github.com:prakaram/gitsshdemo.git
 * [new branch]      master -> master
```