1. **Wifi and Host entry** :
   First Connect **CCCWIFI** in your laptop .
   After that, do a host entry in your laptop .

   Host Entry Steps :
   Open Notepad Editor with Administrator mode and Open host File **(c:\Windows\System32\Drivers\etc\hosts)** and Paste Host entry.

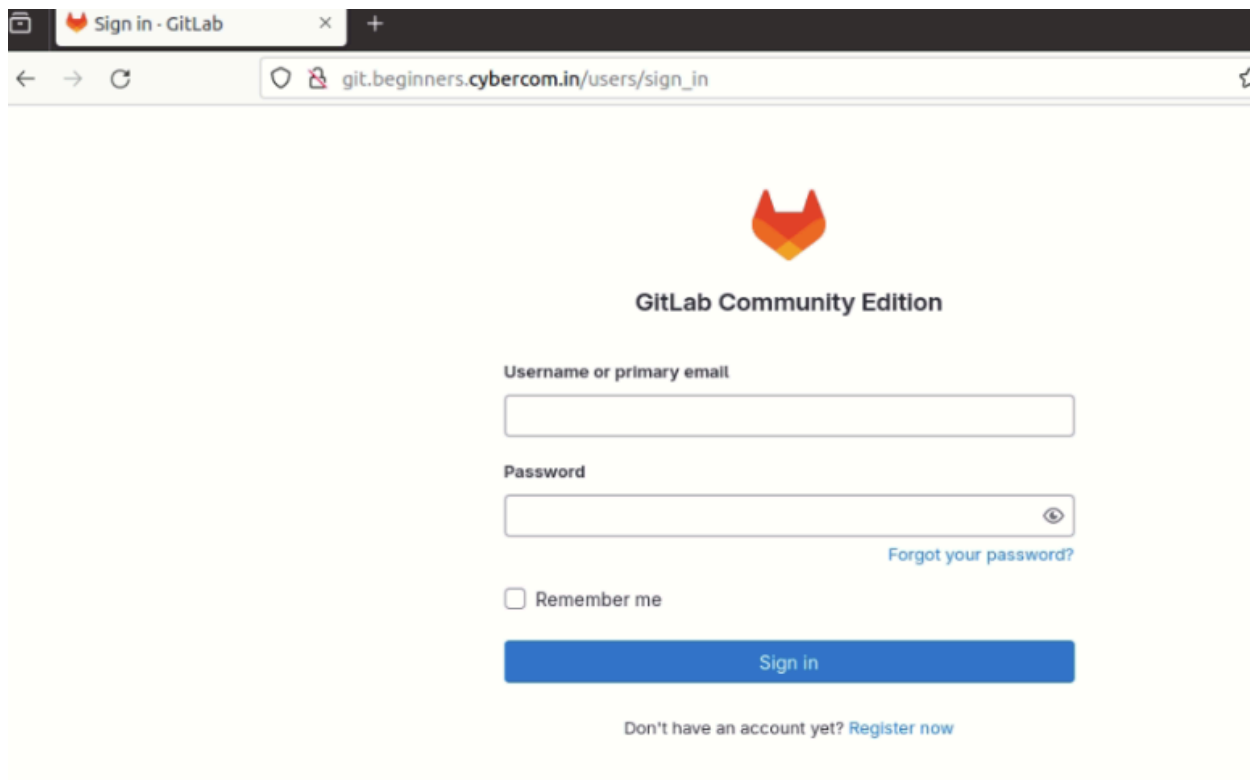   **Host entry - 192.168.1.101   git.beginners.cybercom.in**

2. **Required Software for Git :**
   URL : https://www.git-scm.com/downloads

3. **How to Login git :**
   Open the Browser and paste the below URL to access git .
   URL - http://git.beginners.cybercom.in

   For Git Credentials - Ping to HR (Riya) in Skype .

4. **Profile URLs** : http://git.beginners.cybercom.in/<<username>>/practice
   For Example : http://git.beginners.cybercom.in/jatin.pandit/practice

5. **Generate SSH Key :**

   Open a terminal and Run the below command and Hit the Enter key if any question is asked .

```
Command Prompt

Microsoft Windows [Version 10.0.19045.3803]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (C:\Users\Admin/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in C:\Users\Admin/.ssh/id_rsa.
Your public key has been saved in C:\Users\Admin/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:rTs/L1YArE0uM5CJWzGGX3L3bBpS0+kAUmrHps3gmwM admin@DESKTOP-02RA3DH
The key's randomart image is:
+---[RSA 3072]----+
|   O==OO . .     |
|  o.*=o O o      |
|   ++=+B B       |
|  .o.B* +.*      |
|  E o o=S+..     |
|   . o  ..  .    |
|    +   . .      |
|     .  ..+      |
|       .+.+.     |
+----[SHA256]-----+
```

6. **Add an SSH key to your GitLab account**

   ● Copy the Contain of your Public key File .
      File Path in Windows : **C:\Users\your_username\.ssh\id_rsa.pub**
      Example : **id_rsa.pub**
   Linux System : cat /home/nareshkumar/.ssh/id_rsa.pub

   ● Sign in to Your **GitLab** Account .
      On the left sidebar, select your **avatar**.
      Select Edit **profile**.
      On the left sidebar, select **SSH** Keys.
      Select Add new key.

   ● In the Key box, paste the contents of your public key.
   ● In the Title box, type a description, like Work Laptop or Home Workstation.
   ● **Usage type** and **Expiration date Box** - Default value as it .
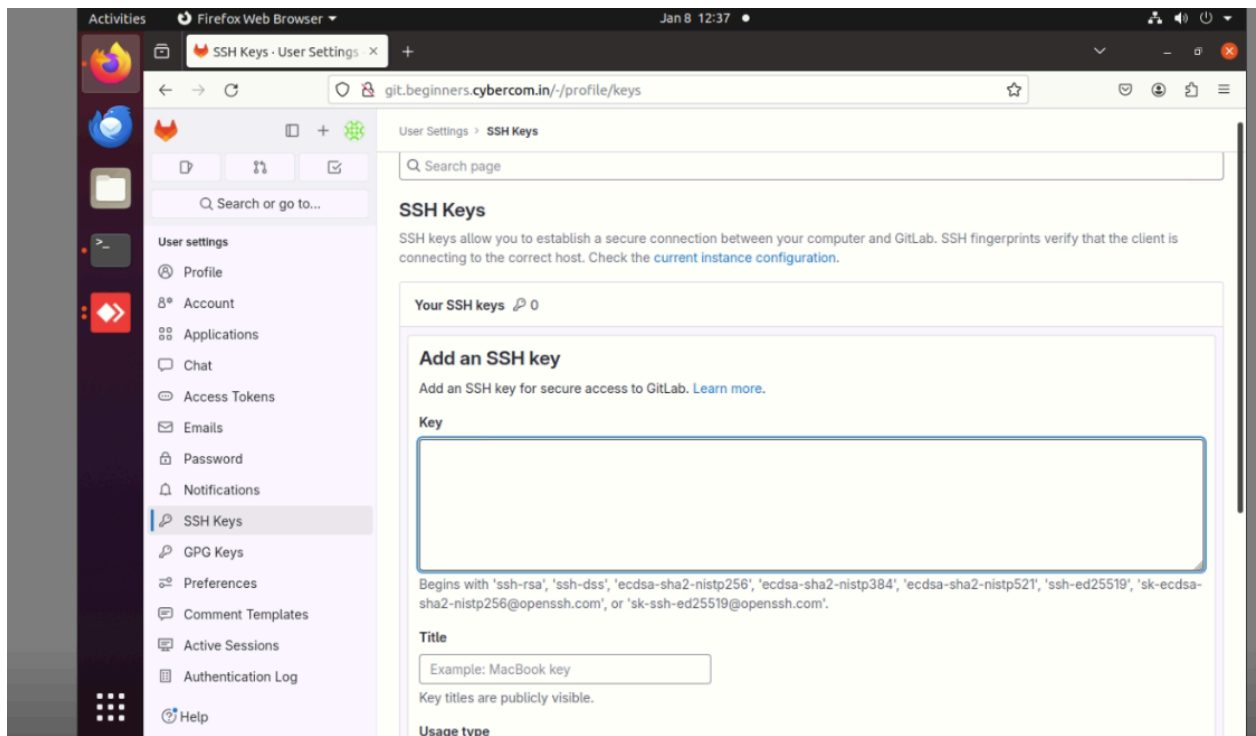
7. **Go inside your Repo and Create 2 New Directory .**

   Repo : http://git.beginners.cybercom.in/<<username>>/practice

   1) One for **practice** work - This is for their own learning.
   2) Second for **assignment** Work - This for the task given by the company.

7. **How to create a new branch** - git checkout -b new-branch-name.

8. **How to switch to an existing branch** - git checkout branch-name.

9. **How to create a branch from another branch** -
   Command: git checkout -b new-branch-name   existing-branch-name

   Note : Make sure that you are on the branch from which you want to branch off before running this command. If you are not on the branch you want to base the new branch on, you can first switch to that branch using the git checkout.
Example : git checkout existing-branch-name

10. **A) View the files that have changed :**
   When you add, change, or delete files or folders, Git knows about the changes. To check   which files have been changed:
 Command : git status
  B) Add and commit local changes :
   When you type git status, locally changed files are shown in red. These changes may be new, modified, or deleted files or folders.
   1. To stage a file for commit:
      Command : git add <file-name OR folder-name>
   2. for add all files :
      Command : git add .
   |
  C) 2.Confirm that the files added to staging:
   Command : git status

The files should be displayed in green text.

D) 3.To commit the staged files:
   Command : git commit -m "COMMENT TO DESCRIBE THE INTENTION OF THE COMMIT"

Send changes to GitLab.com :
E) To push all local changes to the remote repository:
Command: git push <remote> <name-of-branch>
Example : git push origin main

11. **To fetch changes from a remote repository (such as updates made by others), you   use the git fetch command.**
The general syntax is: git fetch remote-name
Example :   git fetch origin

Important Notes:

- Before pushing changes, it's a good practice to fetch changes from the remote repository to ensure you are aware of any updates made by others.
- Always commit your changes locally before pushing, as Git will not allow you to push if you have uncommitted changes.
- Be cautious when fetching and pulling, as they update your local branches. Ensure that you are on the branch where you want to apply changes.

12. If you want to push all local branches to the remote repository without switching to each branch individually, you can use the following command:
   git push --all origin
This command pushes all branches to the remote repository named origin. Replace origin with the actual name of your remote repository if it's different.

If you only want to push specific branches, you can list them explicitly:
  git push origin branch1 branch2 branch3