

Create a new git repository on github

The screenshot shows the GitHub homepage with a dark theme. A modal window titled "Learn Git and GitHub without any code!" is open. It contains a brief introduction and two buttons: "Read the guide" and "Start a project". To the right of the modal, a context menu is open with options: "New repository", "Import repository", "New gist", "New organization", and "New project". Below the modal, there's a section titled "Introduce yourself" with a sample README.md content. At the bottom of the page, a call-to-action box encourages users to "Discover interesting projects and people to populate your personal news feed". The URL <https://github.com/new> is visible at the bottom left.

The screenshot shows two consecutive screenshots of a web browser. The top screenshot is a GitHub repository creation form. The 'Owner' field is set to '123suraj-sky'. The 'Repository name' field is set to 'GitHubTutorial'. A note says 'Great repository names are short and memorable. Need inspiration? How about [probable-palm-tree](#)?'. The 'Description (optional)' field contains 'This is a repository for learning git on CodeWithHarry'. The 'Public' radio button is selected, with the note 'Anyone on the internet can see this repository. You choose who can commit.'. The 'Private' radio button is also present. Below these, there's a section for initializing the repository: 'Add a README file' (unchecked), 'Add a .gitignore' (unchecked), and 'Choose a license' (set to 'None'). A note at the bottom says 'You are creating a public repository in your personal account.' A large green button at the bottom right says 'Creating repository...'. The bottom screenshot shows the repository dashboard for '123suraj-sky/GitHubTutorial'. It has tabs for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. The 'Code' tab is active. A box titled 'Quick setup — if you've done this kind of thing before' contains three sections: 1) 'Set up in Desktop' or 'HTTPS' (selected) or 'SSH' with the URL 'git@github.com:123suraj-sky/GitHubTutorial.git'. It says 'Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#)'. 2) '...or create a new repository on the command line' with the following code:

```
echo "# GitHubTutorial" >> README.md  
git init  
git add README.md  
git commit -m "First commit"  
git branch -M main  
git remote add origin git@github.com:123suraj-sky/GitHubTutorial.git  
git push -u origin main
```

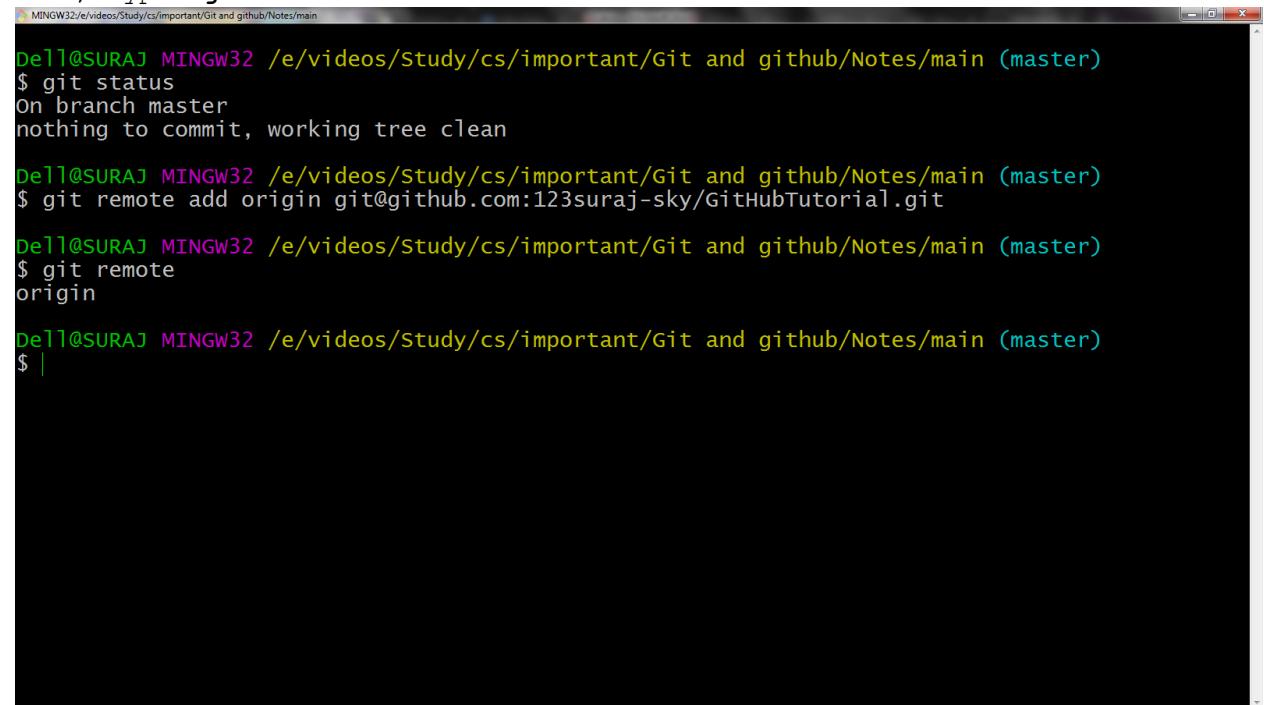
 3) '...or push an existing repository from the command line' with the code:

```
git remote add origin git@github.com:123suraj-sky/GitHubTutorial.git  
git branch -M main  
git push -u origin main
```

 A note below says '...or import code from another repository' with the instruction 'You can initialize this repository with code from a Subversion, Mercurial, or TFS project.' and a 'Import code' button.

Now go to the folder where git repository is present in PC and paste code circled in above photo in git bash (because our git repository is already been setup or else we need to setup these) → "**git remote add origin [git@github.com:123suraj-sky/GitHubTutorial.git](https://github.com/123suraj-sky/GitHubTutorial.git)**" → It means add our original file to github (remote) with name "origin", or we can type any name in place of "origin".

Then, type "**git remote**" to see all remote files



```
Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ git status
On branch master
nothing to commit, working tree clean

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ git remote add origin git@github.com:123suraj-sky/GitHubTutorial.git

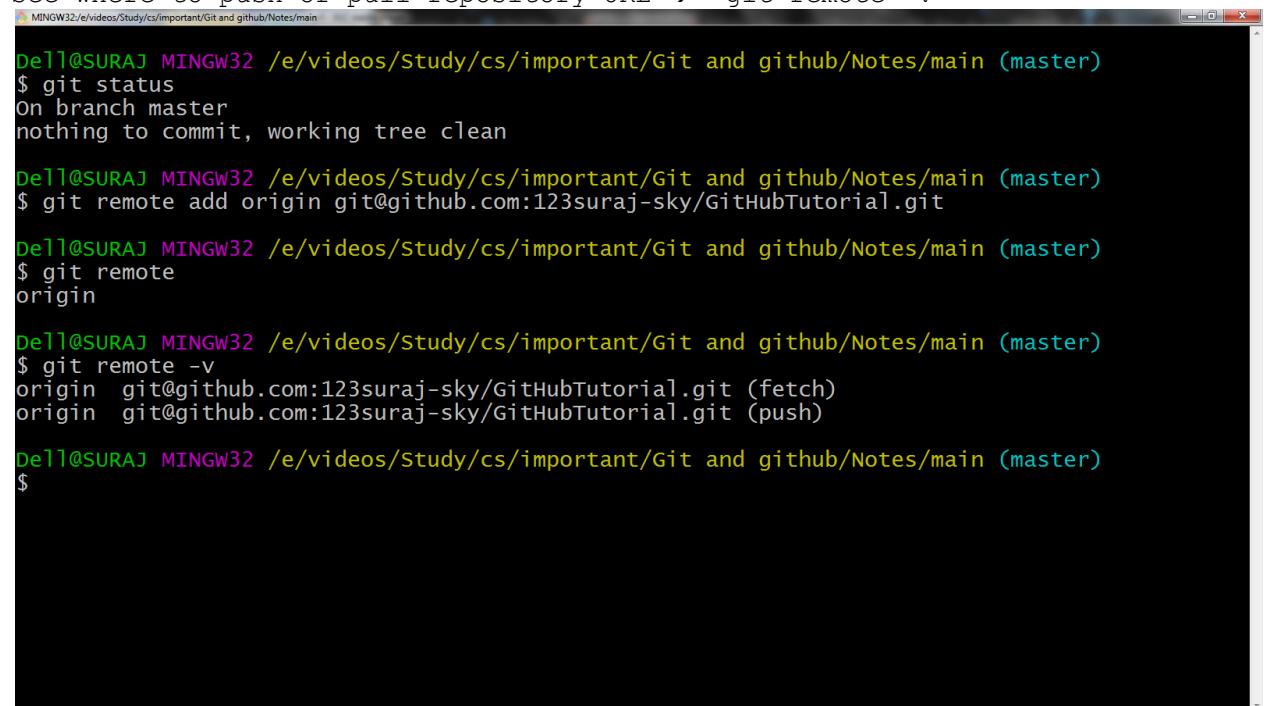
Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ git remote
origin

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ |
```

it tells that we have a remote named origin

The entered URL "<git@github.com:123suraj-sky/GitHubTutorial.git>" is now called origin.

See where to push or pull repository URL → "git remote -v"



```
Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ git status
On branch master
nothing to commit, working tree clean

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ git remote add origin git@github.com:123suraj-sky/GitHubTutorial.git

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ git remote
origin

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ git remote -v
origin  git@github.com:123suraj-sky/GitHubTutorial.git (fetch)
origin  git@github.com:123suraj-sky/GitHubTutorial.git (push)

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$
```

here both URL for pull and push is same but we can change it later (push in another directory and pull in another directory).

Push in any repository

Type → “git push -u origin master” to push a repository but initially it gives error saying permission denied. If here permission is given by default then anyone can add to your repository without your knowledge.

To get permission:

- 1) Go to settings in github

The screenshot shows the GitHub settings page for the repository "123suraj-sky/GitHubTutorial". The "Code" tab is selected. On the right, a sidebar menu is open with "Settings" highlighted. The main content area displays three sections: "Quick setup — if you've done this kind of thing before", "...or create a new repository on the command line", and "...or push an existing repository from the command line". Each section contains a code snippet for performing the respective action via the command line.

The screenshot shows the GitHub profile settings page for the user "123suraj-sky". The left sidebar lists various settings categories: Public profile, Account, Appearance, Accessibility, Notifications, Access, Billing and plans, Emails, Password and authentication, SSH and GPG keys, Organizations, and Moderation. The "Public profile" section is currently active. It includes fields for Name, Profile picture (which shows a green plus sign icon), Public email, Bio, URL, Twitter username, and Company. A message at the bottom of the bio field states: "You can @mention other users and organizations to link to them."

- 2) Go to SSH & GGP keys

3) Click on new SSH keys

The screenshot shows the GitHub user profile page for '123suraj-sky'. On the left, a sidebar lists account settings like Public profile, Account, Appearance, Accessibility, Notifications, Access, Billing and plans, Emails, Password and authentication, SSH and GPG keys (which is selected), Organizations, and Moderation. The main area is titled 'SSH keys / Add new' with a sub-section 'Title' containing 'Sky's new SSH key'. Below it is a 'Key' input field containing a long string of text starting with '-----BEGIN RSA PRIVATE KEY-----'. At the bottom right of this section is a green 'Add SSH key' button.

4) To get SSH keys → google search "ssh keys github"

The screenshot shows a Google search results page for the query 'ssh keys github'. The top result is a link to 'Generating a new SSH key and adding it to the ssh-agent' from the GitHub documentation. Below it, another result is 'Adding a new SSH key to your GitHub account' from the same source. The 'People also ask' section includes questions like 'What is SSH keys in GitHub?', 'How do I find my SSH key in GitHub?', 'How do I generate SSH key in GitHub?', and 'Is it safe to store SSH keys on GitHub?'. At the bottom of the page, there is a link to 'How to Generate SSH Keys for GitHub - Kinsta'.

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "Generating a new SSH key" from the GitHub Docs website at <https://docs.github.com/en/authentication/connecting-to-github-with-ssh/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent>. The left sidebar contains navigation links for GitHub Docs, including sections like "Authentication", "Account security", "Secure your account with 2FA", "Connect with SSH" (which is expanded to show "About SSH", "Check for existing SSH key", "Generate new SSH key" - this is the current page), "Troubleshooting SSH", "Verify commit signatures", and "Troubleshoot verification". The main content area has a heading "Generating a new SSH key" and two numbered steps: 1. Open Git Bash. 2. Paste the text below, substituting in your GitHub email address. A code block shows the command:

```
$ ssh-keygen -t ed25519 -C "your_email@example.com"
```

 Below this, a note says: "Note: If you are using a legacy system that doesn't support the Ed25519 algorithm, use:

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

". A note at the bottom states: "This creates a new SSH key, using the provided email as a label." There is also a link to "Generating public/private algorithm key pair". The right sidebar includes links for "In this article" such as "About SSH key generation", "Generating a new SSH key", "Adding your SSH key to the ssh-agent", "Generating a new SSH key for a hardware security key", and "Further reading".

copy paste highlighted code in git bash

```
MINGW32 /e/videos/study/cs/important/Git and github/Notes/main
nothing to commit, working tree clean

Dell@SURAJ MINGW32 /e/videos/study/cs/important/Git and github/Notes/main (master)
$ git remote add origin git@github.com:123suraj-sky/GitHubTutorial.git

Dell@SURAJ MINGW32 /e/videos/study/cs/important/Git and github/Notes/main (master)
$ git remote
origin

Dell@SURAJ MINGW32 /e/videos/study/cs/important/Git and github/Notes/main (master)
$ git remote -v
origin  git@github.com:123suraj-sky/GitHubTutorial.git (fetch)
origin  git@github.com:123suraj-sky/GitHubTutorial.git (push)

Dell@SURAJ MINGW32 /e/videos/study/cs/important/Git and github/Notes/main (master)
$ git push -u origin main
error: src refspec main does not match any
error: failed to push some refs to 'github.com:123suraj-sky/GitHubTutorial.git'

Dell@SURAJ MINGW32 /e/videos/study/cs/important/Git and github/Notes/main (master)
$ $ ssh-keygen -t ed25519 -C "your_email@example.com"
bash: $: command not found

Dell@SURAJ MINGW32 /e/videos/study/cs/important/Git and github/Notes/main (master)
$ $ ssh-keygen -t ed25519 -C "your_email@example.com"
bash: $: command not found

Dell@SURAJ MINGW32 /e/videos/study/cs/important/Git and github/Notes/main (master)
$ ssh-keygen -t ed25519 -C "yadavsurajkumar665@gmail.com"
MINGW32 /e/videos/study/cs/important/Git and github/Notes/main
bash: $: command not found

Dell@SURAJ MINGW32 /e/videos/study/cs/important/Git and github/Notes/main (master)
$ ssh-keygen -t ed25519 -C "yadavsurajkumar665@gmail.com"
Generating public/private ed25519 key pair.
Enter file in which to save the key (/c/Users/Dell/.ssh/id_ed25519):
/c/Users/Dell/.ssh/id_ed25519 already exists.
Overwrite (y/n)? y
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/Dell/.ssh/id_ed25519
Your public key has been saved in /c/Users/Dell/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:gW9n62xfGBDaK/t8N6/0J0y5oNl1e0ko44oYWGVby5A yadavsurajkumar665@gmail.com
The key's randomart image is:
+--[ED25519 256]--+
| . . . . |
| ..o . . |
| .Eo.o . |
| o.=..o . |
| . .So+ . . |
| o . = + = . |
| . . . o = B + |
| o . =.=.*oBo |
| . . oooo.=*+|
+---[SHA256]---+
Dell@SURAJ MINGW32 /e/videos/study/cs/important/Git and github/Notes/main (master)
$ |
```

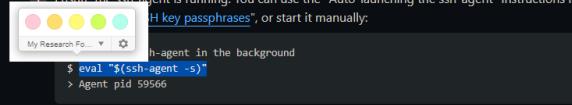
5) Adding ssh key to ssh agent → “`eval "$(ssh-agent -s)"`”

The screenshot shows a browser window with the GitHub Docs URL: <https://docs.github.com/en/authentication/connecting-to-github-with-ssh/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent>. The page title is "Adding your SSH key to the ssh-agent". The left sidebar has sections like "Authentication", "Account security", "Secure your account with 2FA", "Connect with SSH" (which is expanded), "About SSH", "Check for existing SSH key", "Generate new SSH key" (which is selected), "Add a new SSH key", "Test your SSH connection", and "SSH key passphrases". The right sidebar lists "In this article" items: "About SSH key generation", "Generating a new SSH key", "Adding your SSH key to the ssh-agent", and "Generating a new SSH key for a hardware security key". Further reading links are also present.

Adding your SSH key to the ssh-agent

Before adding a new SSH key to the ssh-agent to manage your keys, you should have checked for existing SSH keys and generated a new SSH key.

If you have [GitHub Desktop](#) installed, you can use it to clone repositories and not deal with SSH keys.

- 1 Ensure the ssh-agent is running. You can use the "Auto-launching the ssh-agent" instructions in [My Research Project](#), or run `ssh-add -m "SSH key passphrases"`, or start it manually:


```
$ eval `ssh-agent -s`
> Agent pid 5956
```
- 2 Add your SSH private key to the ssh-agent. If you created your key with a different name, or if you are adding an existing key that has a different name, replace `id_ed25519` in the command with the name of your private key file.

```
$ ssh-add ~/.ssh/id_ed25519
```
- 3 Add the SSH key to your account on GitHub. For more information, see "[Adding a new SSH key to your GitHub account](#)".

Generating a new SSH key for a hardware security key

Generating public/private ed25519 key pair.
Enter file in which to save the key (/c/Users/Dell/.ssh/id_ed25519):
/c/Users/Dell/.ssh/id_ed25519 already exists.
Overwrite (y/n)? y
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/Dell/.ssh/id_ed25519
Your public key has been saved in /c/Users/Dell/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:gW9n62xfGBDaK/t8N6/0Joy5oNl1e0ko44oYWGVby5A yadavsurajkumar665@gmail.com
The key's randomart image is:

```
+--[ED25519 256]--+
|          .       |
|         ..o      |
|        .Eo.o     |
|        O.=...o   |
|        . .So+ . . |
|        O . = + = . |
|        . . o = B +|
|        O .=.=.*oBo|
|        . . oOoo.=*+|
+---[SHA256]---
```

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
\$ eval "\$(ssh-agent -s)"
Agent pid 1933

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
\$ |

6)

The screenshot shows a browser window with the URL <https://docs.github.com/en/authentication/connecting-to-github-with-ssh/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent>. The page title is "Adding your SSH key to the ssh-agent". The left sidebar has sections like "Authentication", "Account security", "Secure your account with 2FA", "Connect with SSH" (which is expanded to show "About SSH", "Check for existing SSH key", "Generate new SSH key" - this is selected, "Add a new SSH key", "Test your SSH connection", and "SSH key passphrases"), "Troubleshooting SSH", "Verify commit signatures", and "Troubleshoot verification". The main content area has a heading "Before adding a new SSH key to the ssh-agent to manage your keys, you should have checked for existing SSH keys and generated a new SSH key." Below this, step 1 shows a command to start the ssh-agent: "# start the ssh-agent in the background \$ eval `\$(ssh-agent -s)` > Agent pid 59566". Step 2 shows the command to add the private key: "\$ ssh-add ~/.ssh/id_ed25519". Step 3 is a link to "Adding a new SSH key to your GitHub account". A "In this article" sidebar on the right lists "About SSH key generation", "Generating a new SSH key", "Adding your SSH key to the ssh-agent", "Generating a new SSH key for a hardware security key", and "Further reading".

7)

The terminal window shows the following steps:

```
MINGW32/e/videos/Study/cs/important/Git and github/Notes/main
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/Dell/.ssh/id_ed25519
Your public key has been saved in /c/Users/Dell/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:gW9n62xFGBDaK/t8N6/0J0y5oNl1e0ko44oYWGVby5A yadavsurajkumar665@gmail.com
The key's randomart image is:
+--[ED25519 256]--+
|   .               |
|   ..              |
|   .o.             |
|   .Eo.o           |
|   O.=..o          |
|   . .So+ . .      |
|   O . . = + = .   |
|   . . . o = B +|  |
|   O .=. .*oBo|   |
|   . . oooo.=*+|  |
+---[SHA256]-----+
Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ eval "$(ssh-agent -s)"
Agent pid 1933

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ ssh-add ~/.ssh/id_ed25519
Identity added: /c/Users/Dell/.ssh/id_ed25519 (yadavsurajkumar665@gmail.com)

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$
```

8) <https://docs.github.com/en/authentication/connecting-to-github-with-ssh/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent>

The screenshot shows a browser window with the GitHub Docs URL. The left sidebar has sections like All products, Authentication, Account security, Secure your account with 2FA, Connect with SSH (with Generate new SSH key selected), Troubleshooting SSH, Verify commit signatures, and Troubleshoot verification. The main content area is titled "Adding your SSH key to the ssh-agent". It says to ensure the ssh-agent is running, then add the private key to it using a command like \$ ssh-add ~/.ssh/id_ed25519. Finally, it says to add the public key to your GitHub account. A note at the bottom says "Generating a new SSH key for a hardware security key".

8)

Type “tail ***” and paste code highlighted in ss

9) <https://docs.github.com/en/github/authenticating-to-github/adding-a-new-ssh-key-to-your-github-account>

The screenshot shows a browser window with the GitHub Docs URL. The left sidebar is identical to the previous one. The main content area is titled "Add a new SSH key". It notes that DSA keys are no longer supported and RSA keys must use SHA-2 signatures. Step 1 is to copy the public key to the clipboard using \$ clip < ~/.ssh/id_ed25519.pub. Step 2 is to click the profile photo in the top right and then click Settings. A note at the bottom says "Generating a new SSH key for a hardware security key".

9) In the upper-right corner of any page, click your profile photo, then click Settings.

```
MINGW32/e/videos/Study/cs/important/Git and github/Notes/main
SHA256:gW9n62xfGBDaK/t8N6/0JOy5oN1e0ko44oYWGvby5A yadavsurajkumar665@gmail.com
The key's randomart image is:
+--[ED25519 256]--+
| . .
| ..o .
| .Eo.o
| o.=..o
| . .So+ . .
| o . = + = .
| . . . o = B +
| o .=.=.*oBo|
| . . oooo.=*+
+---[SHA256]---+
Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ eval "$(ssh-agent -s)"
Agent pid 1933

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ ssh-add ~/.ssh/id_ed25519
Identity added: /c/Users/Dell/.ssh/id_ed25519 (yadavsurajkumar665@gmail.com)

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ tail ~/.ssh/id_ed25519.pub
ssh-ed25519 AAAAC3NzaC1ZDI1NTE5AAAAIJUZ33ty4I6m/AO31jLn3UmPzLJ+psW1iSHycmzJs+m yadavsurajku
mar665@gmail.com

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$
```

10) Copy and paste following in github
11)

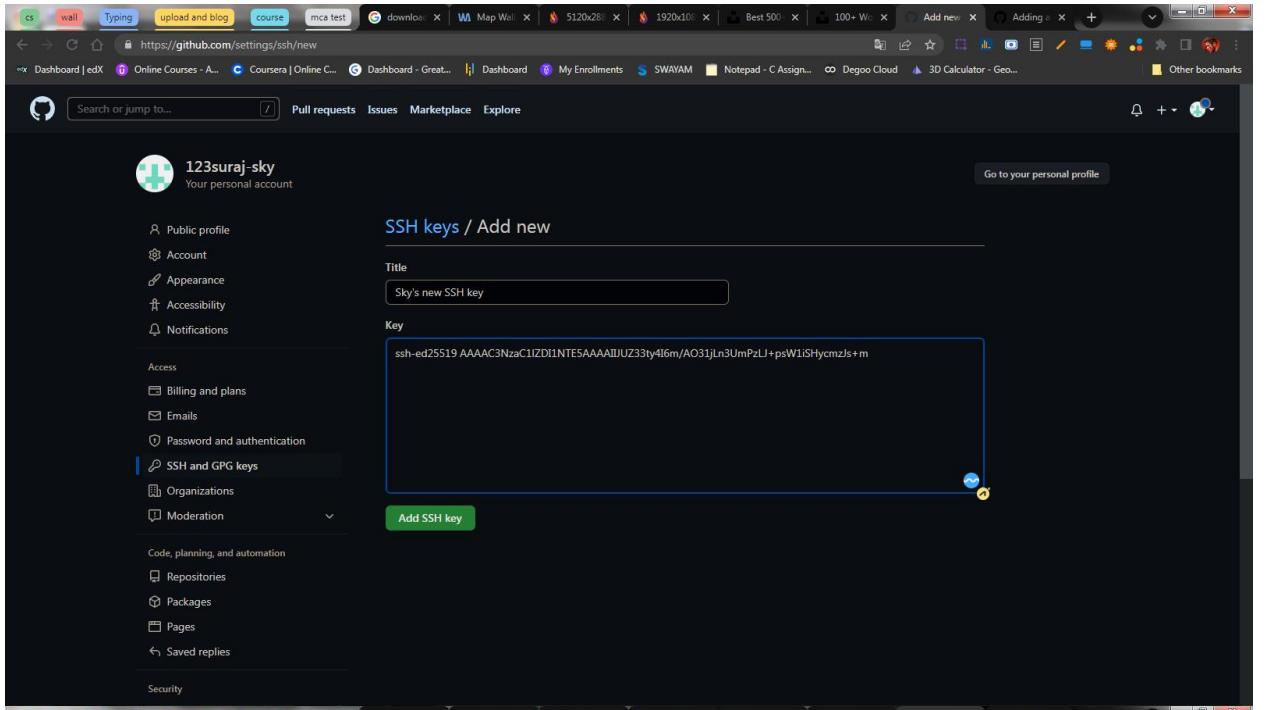
```
.Eo.o
o.=..o
. .So+ . .
o . = + = .
. . . o = B +
o .=.=.*oBo|
. . oooo.=*+
+---[SHA256]---+
Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ eval "$(ssh-agent -s)"
Agent pid 1933

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ ssh-add ~/.ssh/id_ed25519
Identity added: /c/Users/Dell/.ssh/id_ed25519 (yadavsurajkumar665@gmail.com)

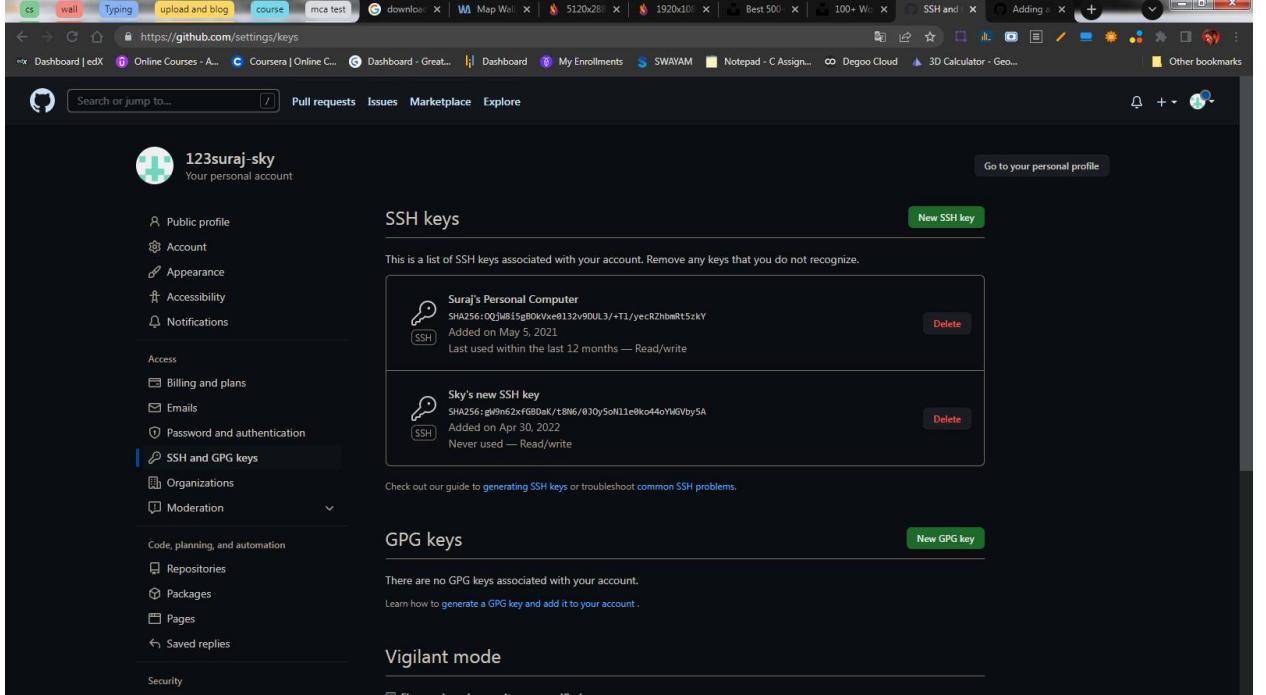
Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ tail ~/.ssh/id_ed25519.pub
ssh-ed25519 AAAAC3NzaC1ZDI1NTE5AAAAIJUZ33ty4I6m/AO31jLn3UmPzLJ+psW1iSHycmzJs+m yadavsurajku
mar665@gmail.com

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ tail ~/.ssh/id_ed25519.pub
ssh-ed25519 AAAAC3NzaC1ZDI1NTE5AAAAIJUZ33ty4I6m/AO31jLn3UmPzLJ+psW1iSHycmzJs+m yadavsurajku
mar665@gmail.com

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ |
```



The screenshot shows the GitHub account settings for user '123suraj-sky'. The left sidebar lists various account management sections. The 'SSH and GPG keys' section is currently selected. On the right, the 'SSH keys / Add new' form is displayed. A title 'Sky's new SSH key' has been entered, and the corresponding SSH key value is pasted into the 'Key' field:
`ssh-ed25519 AAAAC3NzaC1IzDlINTE5AAAAIUZ33ty4l6m/AO3jLn3UmPzLJ+psW1iHycmzJs+m`



The screenshot shows the GitHub account settings for user '123suraj-sky'. The left sidebar lists various account management sections. The 'SSH and GPG keys' section is currently selected. On the right, the 'SSH keys' list is displayed, showing two entries:

- Suraj's Personal Computer**
SHA256: 0J9w815g0Kvxe8132v90UL3/+T1/ye:cRZhbRt5zKY
Added on May 5, 2021
Last used within the last 12 months — Read/write
- Sky's new SSH key**
SHA256: gB9e62xfGB0k/t8N6/03Oy5oN11c0ko44oYMGVby5A
Added on Apr 30, 2022
Never used — Read/write

A 'New SSH key' button is located at the top right of the list. Below the SSH keys, there is a 'GPG keys' section which states 'There are no GPG keys associated with your account.' and a 'Vigilant mode' section.

Now we run command to push files “git push -u origin master”

```
MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ git remote -v
origin  git@github.com:123suraj-sky/GitHubTutorial.git (fetch)
origin  git@github.com:123suraj-sky/GitHubTutorial.git (push)

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ git remote add origin git@github.com:123suraj-sky/GitHubTutorial.git
error: remote origin already exists.

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ git push -u origin master
Enumerating objects: 163, done.
Counting objects: 100% (163/163), done.
Delta compression using up to 2 threads
Compressing objects: 100% (156/156), done.
Writing objects: 100% (163/163), 85.89 KiB | 1.28 MiB/s, done.
Total 163 (delta 19), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (19/19), done.
To github.com:123suraj-sky/GitHubTutorial.git
 * [new branch]      master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.

Dell@SURAJ MINGW32 /e/videos/Study/cs/important/Git and github/Notes/main (master)
$ |
```