Pre Lab 2

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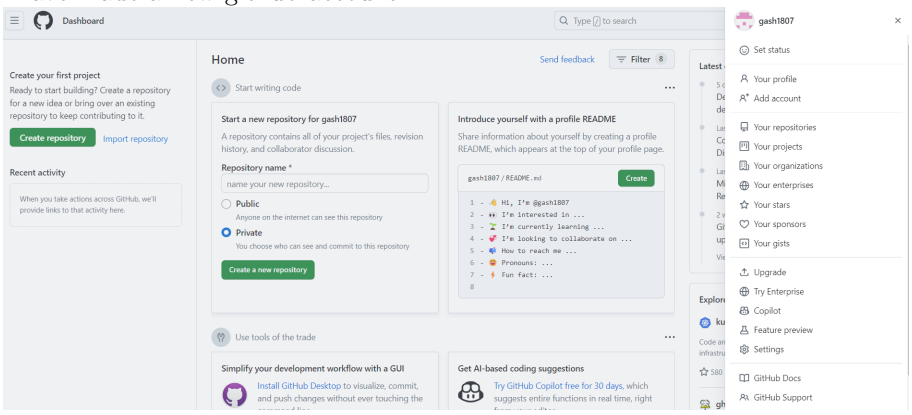
I have made a new github account



below are the instructions for creating and adding a new ssh key

1. Open Git Bash.
2. Paste the text below, replacing the email used in the example with your GitHub email address.

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

> **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"
> ```

This creates a new SSH key, using the provided email as a label.

```
> Generating public/private ALGORITHM key pair.
```

When you're prompted to "Enter a file in which to save the key", you can press **Enter** to accept the default file location. Please note that if you created SSH keys previously, ssh-keygen may ask you to rewrite another key, in which case we recommend creating a custom-named SSH key. To do so, type the default file location and replace id_ALGORITHM with your custom key name.

```
> Enter file in which to save the key (/c/Users/YOU/.ssh/id_ALGORITHM):[Press enter]
```

3. At the prompt, type a secure passphrase. For more information, see "Working with SSH key passphrases."

```
> Enter passphrase (empty for no passphrase): [Type a passphrase]
> Enter same passphrase again: [Type passphrase again]
```

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. In a new *admin elevated* PowerShell window, ensure the ssh-agent is running. You can use the "Auto-launching the ssh-agent" instructions in "Working with SSH key passphrases", or start it manually:

```
# start the ssh-agent in the background
Get-Service -Name ssh-agent | Set-Service -StartupType Manual
Start-Service ssh-agent
```

2. In a terminal window without elevated permissions, 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 c:/Users/YOU/.ssh/id_ed25519
```

3. Add the SSH public 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

If you are using macOS or Linux, you may need to update your SSH client or install a new SSH client prior to generating a new SSH key. For more information, see "Error: Unknown key type."

1. Insert your hardware security key into your computer.
2. Open Git Bash.
3. Paste the text below, replacing the email address in the example with the email address associated with your account on GitHub.

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

> **Note:** If the command fails and you receive the error `invalid format` or `feature not supported`, you may be using a hardware security key that does not support the Ed25519 algorithm. Enter the following command instead.
>
> ```
> ssh-keygen -t ecdsa-sk -C "your_email@example.com"
> ```

4. When you are prompted, touch the button on your hardware security key.
5. When you are prompted to "Enter a file in which to save the key," press Enter to accept the default file location.

```
> Enter a file in which to save the key (c:\Users\YOU\.ssh\id_ed25519_sk):[Press
enter]
```

6. When you are prompted to type a passphrase, press **Enter**.

```
> Enter passphrase (empty for no passphrase): [Type a passphrase]
> Enter same passphrase again: [Type passphrase again]
```

7. Add the SSH public key to your account on GitHub. For more information, see "Adding a new SSH key to your GitHub account."

and now I will create a new ssh key using the directions below

Adding a new SSH key to your account

You can add an SSH key and use it for authentication, or commit signing, or both. If you want to use the same SSH key for both authentication and signing, you need to upload it twice.

After adding a new SSH authentication key to your account on GitHub.com, you can reconfigure any local repositories to use SSH. For more information, see "Managing remote repositories."

> **Note:** GitHub improved security by dropping older, insecure key types on March 15, 2022.
>
> As of that date, DSA keys (`ssh-dss`) are no longer supported. You cannot add new DSA keys to your personal account on GitHub.com.
>
> RSA keys (`ssh-rsa`) with a `valid_after` before November 2, 2021 may continue to use any signature algorithm. RSA keys generated after that date must use a SHA-2 signature algorithm. Some older clients may need to be upgraded in order to use SHA-2 signatures.

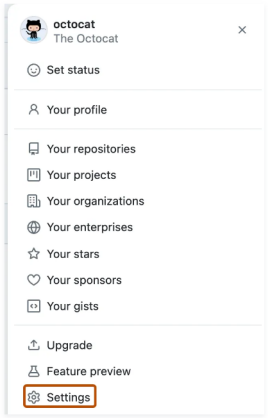
1. Copy the SSH public key to your clipboard.

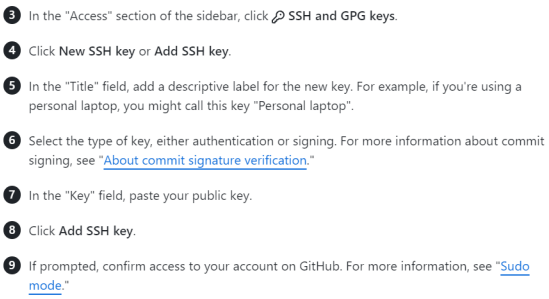
   If your SSH public key file has a different name than the example code, modify the filename to match your current setup. When copying your key, don't add any newlines or whitespace.

   ```
   $ clip < ~/.ssh/id_ed25519.pub
   # Copies the contents of the id_ed25519.pub file to your clipboard
   ```

   > **Notes:**
   >
   > - With Windows Subsystem for Linux (WSL), you can use `clip.exe`. Otherwise if `clip` isn't working, you can locate the hidden `.ssh` folder, open the file in your favorite text editor, and copy it to your clipboard.
   > - On newer versions of Windows that use the Windows Terminal, or anywhere else that uses the PowerShell command line, you may receive a `ParseError` stating that `The '<' operator is reserved for future use.` In this case, the following alternative `clip` command should be used:
   >
   > ```
   > $ cat ~/.ssh/id_ed25519.pub | clip
   > # Copies the contents of the id_ed25519.pub file to your clipboard
   > ```

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





and now the SSH key has been added