Passwordless SSH access

1. Check for existing SSH Keys
   First check for there are already keys on the Linux system you are using. I am taking the case of RPI
   ls ~/.ssh

if you see file named **id_rsa.pub** or **id_dsa.pub** then you have keys set up already, so skip the generation. Follow step 3.

2. Generate new SSH Keys
   To generate new SSH keys enter the below command.
   ssh-keygen

Upon entering this command, you will be asked for some entries press enter every time you are asked to enter anything.

When the process complete you will see output like this

```
pi@raspberrypi:~ $ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/pi/.ssh/id_rsa):
Created directory '/home/pi/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/pi/.ssh/id_rsa.
Your public key has been saved in /home/pi/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:UfEgiOdTtpPvUXBL1QNm8TYJZ1AJDwClIyp+f59VrLM pi@raspberrypi
The key's randomart image is:
+---[RSA 2048]----+
|      . ...*+.@B=.|
|     . o oooo= Boo|
|      o +.= +.. *.|
|       + =.. o o .|
|    . . .So .    o|
|   . .      o   o |
|    . .    . . +  |
|     . .  .. o o  |
|        .. .o E   |
+----[SHA256]-----+
pi@raspberrypi:~ $
```

Now look inside your **.ssh** directory

ls ~/.ssh

you should see the files **id_rsa** and **id_rsa.pub**
The id_rsa file is your private key. Keep this on your computer/Linux device.
The id_rsa.pub files is your public key. That is what you share with machines you connect to in this case Raspberry Pi.

3. Copy the public file.
   cat ~/.ssh/id_rsa.pub
   Copy and share the file. File is similar like this.

```
pi@raspberrypi:~ $ cat ~/.ssh/id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDFwi0DhPMj5n/gyVK1CYq9Y/MA4q5KLc0M8nldIwEO2tuCDJ3m1Kdp/zDca3yY5rcUq8TUd+4M4eUXhXjj
L+oxy5R5sbJ4Z7sASEXtX5JUMEl2btq6qr5Revz/6TRcNvgzNEmbQqTtf/J6bTjzMqP1ife2qDQKN7IuVn9nZCmfvXzMMKDmgsKSlFkaLBfkzw95oyKnO3Mq
kc8GVqmzItrCdj5QQNOlkRtI7ZkioHweccZKNyHSzpUHCBisV3jjXDcOw4jk7ICvCNb8HE0e2ACU2kcFdFCTqGG0IRsisLhgq1m5hH7dEjElhokDeARan/28
8ZtQ0jG8r+uBER0WhoLZ pi@raspberrypi
```