**Objective**

Client: I want to have an ec2 Linux machine in AWS,

we have 3 employees named Mike, Jack and Jill, they want to use the machine, we have less budget and low usage of Linux machine

Each person should be having dedicated working space

no user should have access to other users’ folder or files in the Linux machine

Users should not use the password; they should use latest SSH method to login to the system

Breaking down the objectives

1. We need a Linux machine with basic features
2. We should create 3 users named Mike, Jack and Jill with respective home directories
3. All 3 users should have access to ec2 instance, we will use IAM
4. All 3 users should be able to login to machine using SSH keypair authentication method
5. Once each user logs-in they should be in their own user home directory.
6. we launched the amazon linux ec2 instance in AWS
7. we created 3 users in linux with respective home directories:
   1. sudo useradd Mike -m -d /home/Mike -s bin/bash
   2. sudo useradd Jack -m -d /home/Jack -s bin/bash
   3. sudo useradd Jill -m -d /home/Jill -s bin/bash
8. we have created IAM users and given full access to EC2 instance
9. to use ssh key pair, we need to generate ssh key for 3 users
   1. mkdir -p ~Mike && ssh-keygen -t rsa -f ~/Mike/Mike
   2. mkdir -p ~Jack && ssh-keygen -t rsa -f ~/Jack/Jack
   3. mkdir -p ~Jill && ssh-keygen -t rsa -f ~/Jill/Jill
10. We have created .ssh folders on each user’s home directory then,

we have copied the public key content of each user to /.ssh/authorized\_keys file

sudo -u Mike mkdir /home/Mike/.ssh

sudo -u Mike echo "contents\_of\_MikeKey.pub" > /home/Mike/.ssh/authorized\_keys

we configured the ssh file at root/etc/ssh/sshd\_config

SSH Configuration:

Ensure that SSH is configured to allow public key authentication. In the /etc/ssh/sshd\_config file, make sure the following settings are set:

PasswordAuthentication no

PubkeyAuthentication yes

Restart the SSH service for the changes to take effect:

sudo systemctl restart sshd

Now each user can use his private key to access the system,

Note: to copy the private key content and make a pem file for eachuser  
  
After that we have given the sudoer permission to Mike in following way

1. we added the Mike in wheel group

usermod -aG wheel 'Mike'

1. Then we edited the sudo visudo file

uncommented the below section , so that users in wheel group can use sudo without password

