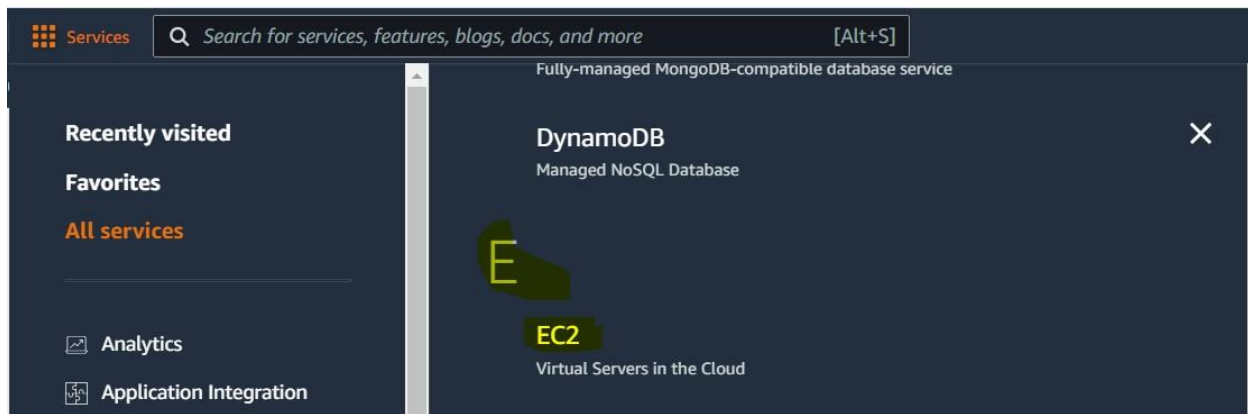


Procedure To launch the EC2 instance / VM / Server.

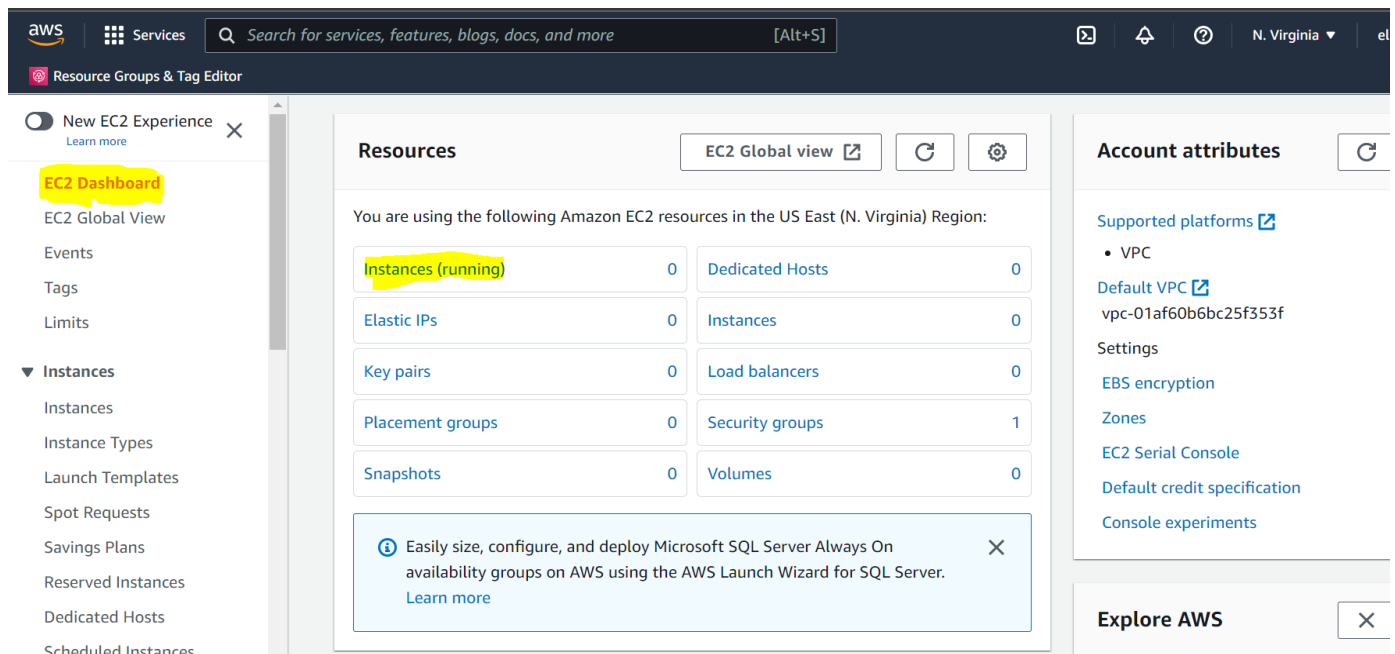
Login in to amazon Webservice <https://aws.amazon.com>

Search for EC2 in services or open below link

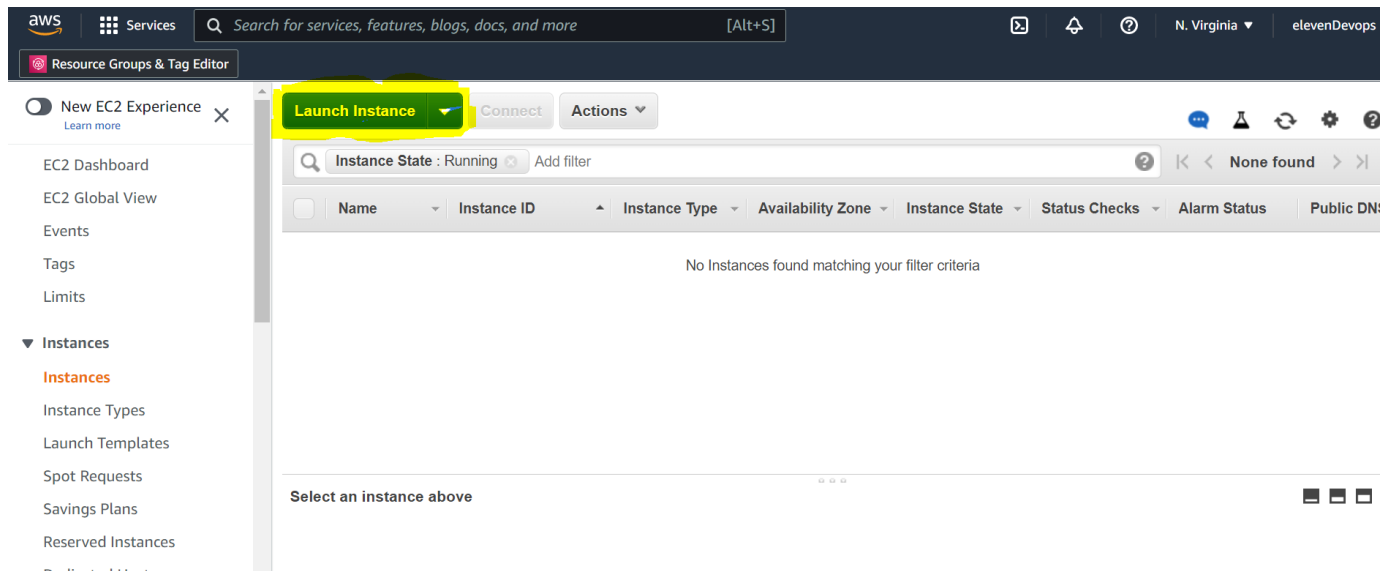
Open the Amazon EC2 console at <https://console.aws.amazon.com/ec2/>



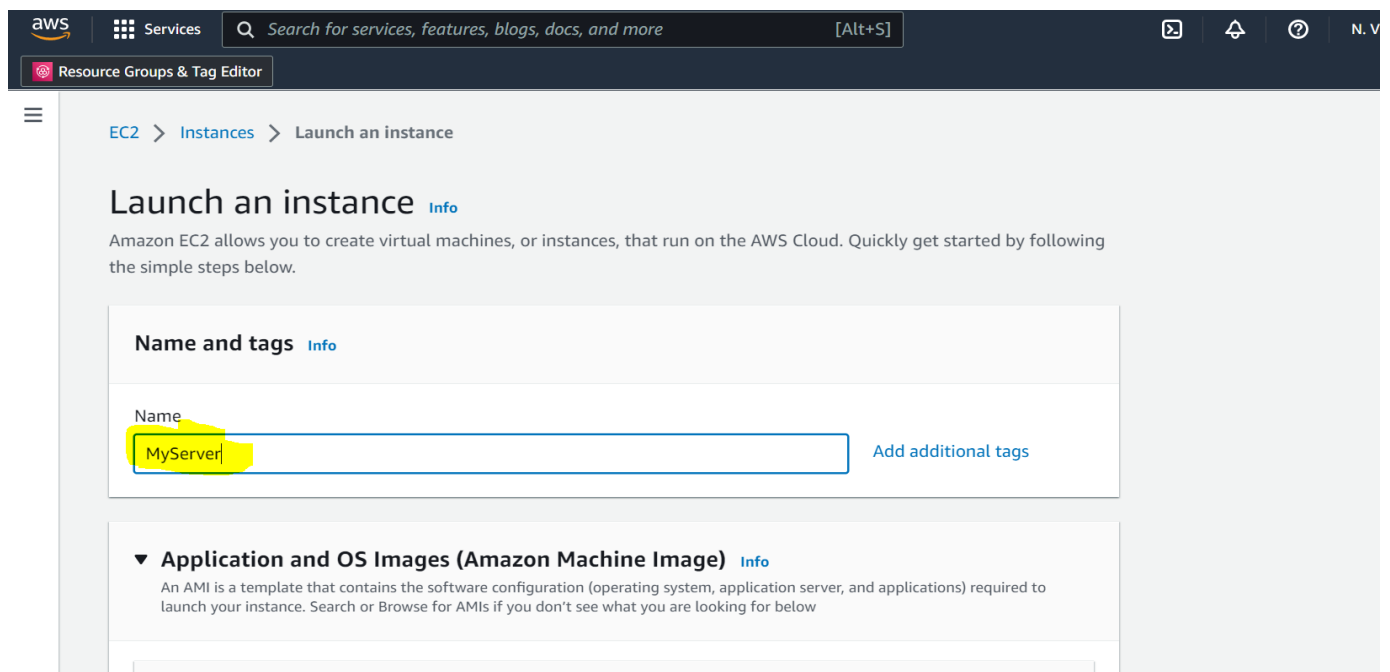
we need to click on EC2 Dashboard , instances (running)



Choose **Launch Instance**.



New page will get opened like below, give a name to your server as shown below & scroll down the page for options





Step 1: Application and OS Images (Amazon Machine Image)


(** Leave everything as default)


Choose an Operating system Amazon **Linux** AMI (or ubuntu)


Quick Start

**Amazon Linux**
aws


macOS
Mac

Ubuntu
ubuntu

Windows
Microsoft

Red Hat
Red Hat

S
>


Browse more AMIs
Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type
ami-09d3b3274b6c5d4aa (64-bit (x86)) / ami-081dc0707789c2daf (64-bit (Arm))
Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible ▼

Description

Amazon Linux 2 Kernel 5.10 AMI 2.0.20221004.0 x86_64 HVM gp2

Architecture

AMI ID

64-bit (x86) ▼

ami-09d3b3274b6c5d4aa

Verified provider

Step 2: Choose an Instance Type (** Leave everything as default)

▼ **Instance type** [Info](#)

Instance type

t2.micro

Family: t2 1 vCPU 1 GiB Memory
On-Demand Linux pricing: 0.0116 USD per Hour
On-Demand Windows pricing: 0.0162 USD per Hour

Free tier eligible ▼

[Compare instance types](#)

Step 3: Key pair (login)

Click on create new keypair

▼ Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required

Select ▼

↻ Create new key pair

New window will get popped up give keypair a name & download to your computer

Note: don't give space while naming keypair

Create key pair

×

Key pairs allow you to connect to your instance securely.

Enter the name of the key pair below. When prompted, store the private key in a secure and accessible location on your computer. **You will need it later to connect to your instance.** [Learn more](#) [↗](#)

Key pair name

my_keypair

The name can include upto 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type

☒ RSA

RSA encrypted private and public key pair

☐ ED25519

ED25519 encrypted private and public key pair (Not supported for Windows instances)

Private key file format

☒ .pem

For use with OpenSSH

☐ .ppk

For use with PuTTY

Cancel

Create key pair

Step 4: Network settings (** Leave everything as default)

▼ Network settings Info

Edit

Network Info

vpc-01af60b6bc25f353f

Subnet Info

No preference (Default subnet in any availability zone)

Auto-assign public IP Info

Enable

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☒ Create security group

☐ Select existing security group

We'll create a new security group called 'launch-wizard-1' with the following rules:

☒ Allow SSH traffic from

Helps you connect to your instance

Anywhere
0.0.0.0/0

☐ Allow HTTPS traffic from the internet

To set up an endpoint, for example when creating a web server

☐ Allow HTTP traffic from the internet

To set up an endpoint, for example when creating a web server

⚠ Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

×

Step 5: Configure storage (** Leave everything as default)

▼ Configure storage Info

Advanced

1x

8

GiB

gp2

Root volume (Not encrypted)

ⓘ Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

×

Add new volume

0 x File systems

Edit

In Step 6: Summary(**** Leave everything as default ****)

Click on launch instance

aws Services Search for services, features, blogs, docs, and more [Alt+S]

Resource Groups & Tag Editor

ami-09d3b3274b6c5d4aa (64-bit (x86)) / ami-081dc0707789c2da7 (64-bit (Arm))
Virtualization: hvm ENA enabled: true Root device type: ebs

Description
Amazon Linux 2 Kernel 5.10 AMI 2.0.20221004.0 x86_64 HVM gp2

Architecture 64-bit (x86) AMI ID ami-09d3b3274b6c5d4aa **Verified provider**

► Instance type Info

▼ Key pair (login) Info
You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required
my_keypair Create new key pair

► Network settings Info Edit

► Configure storage Info Advanced

► Advanced details Info

▼ Summary

Number of instances Info
1

Software Image (AMI)
Amazon Linux 2 Kernel 5.10 AMI...read more
ami-09d3b3274b6c5d4aa

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel Launch instance

Click on view all instances

aws Services Search for services, features, blogs, docs, and more [Alt+S]

Resource Groups & Tag Editor

EC2 > Instances > Launch an instance

Success
Successfully initiated launch of instance (i-0f07ae4c4017dc78e)
► Launch log

Next Steps

Create billing and free tier usage alerts
To manage costs and avoid surprise bills, set up email notifications for billing and free tier usage thresholds.
Create billing alerts

Connect to your instance
Once your instance is running, log into it from your local computer.
Connect to instance
Learn more

Connect an RDS database **New**
Configure the connection between an EC2 instance and a database to allow traffic flow between them.
Connect an RDS database
Create a new RDS database Learn more

View all instances

Instance will be launched in 3-4 minutes...

The screenshot displays the AWS Management Console for the us-east-1 region. The left-hand navigation pane shows the 'Instances' section expanded, with 'Instances' highlighted. The main content area shows a table of EC2 instances. One instance, 'MyServer1', is listed with the following details:

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS
MyServer1	i-0512285497d3c58eb	t2.micro	us-east-1c	running	2/2 checks ...	None	ec2-174-129-52-31.compute-1.amazonaws.com

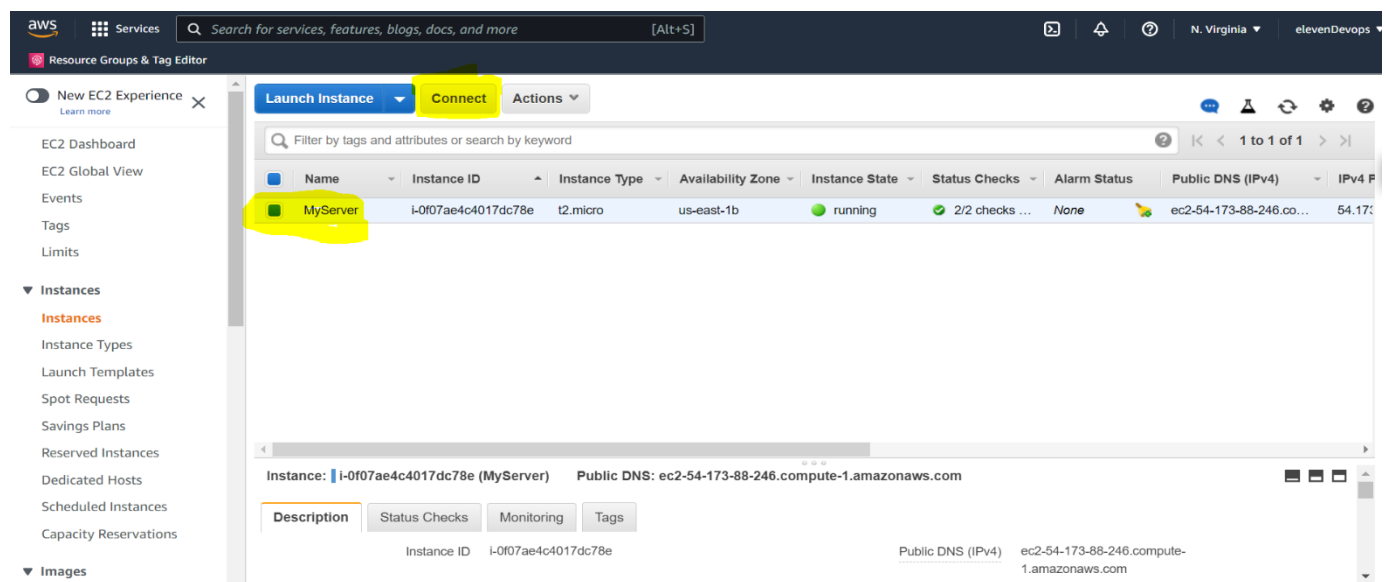
Below the table, the details for the selected instance 'i-0512285497d3c58eb (MyServer1)' are shown. The 'Description' tab is active, displaying the instance ID and the public DNS name: 'ec2-174-129-52-31.compute-1.amazonaws.com'.

If you see like this you have launched an EC2 instance / server succesfull

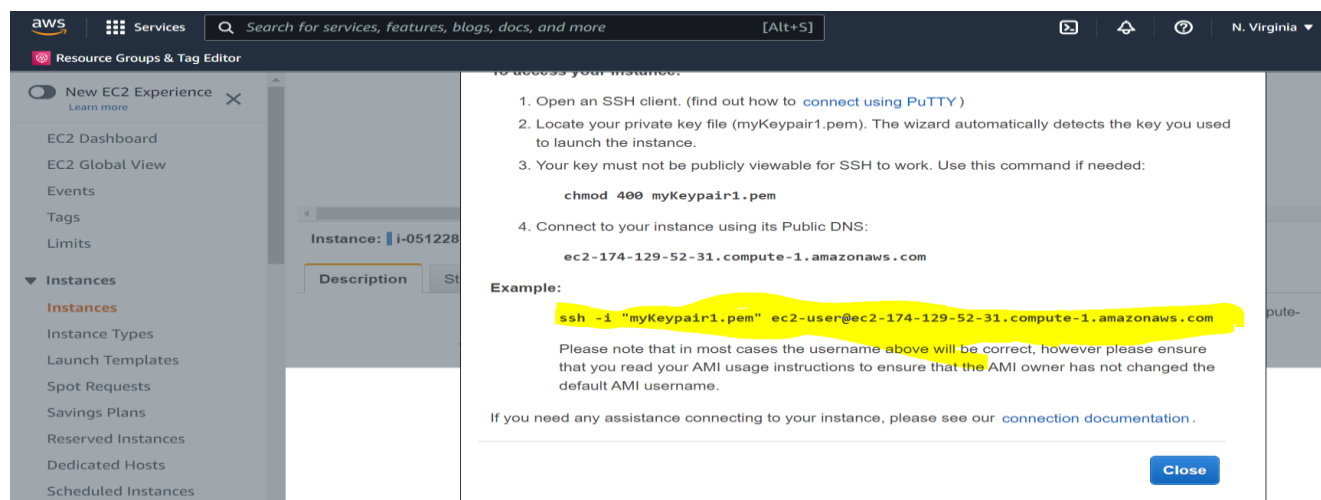
Procedure to connect to Servers / EC2 Instances / Virtual Machine created from our Laptop:

To connect to your Ec2 instance need to select instance and click on connect

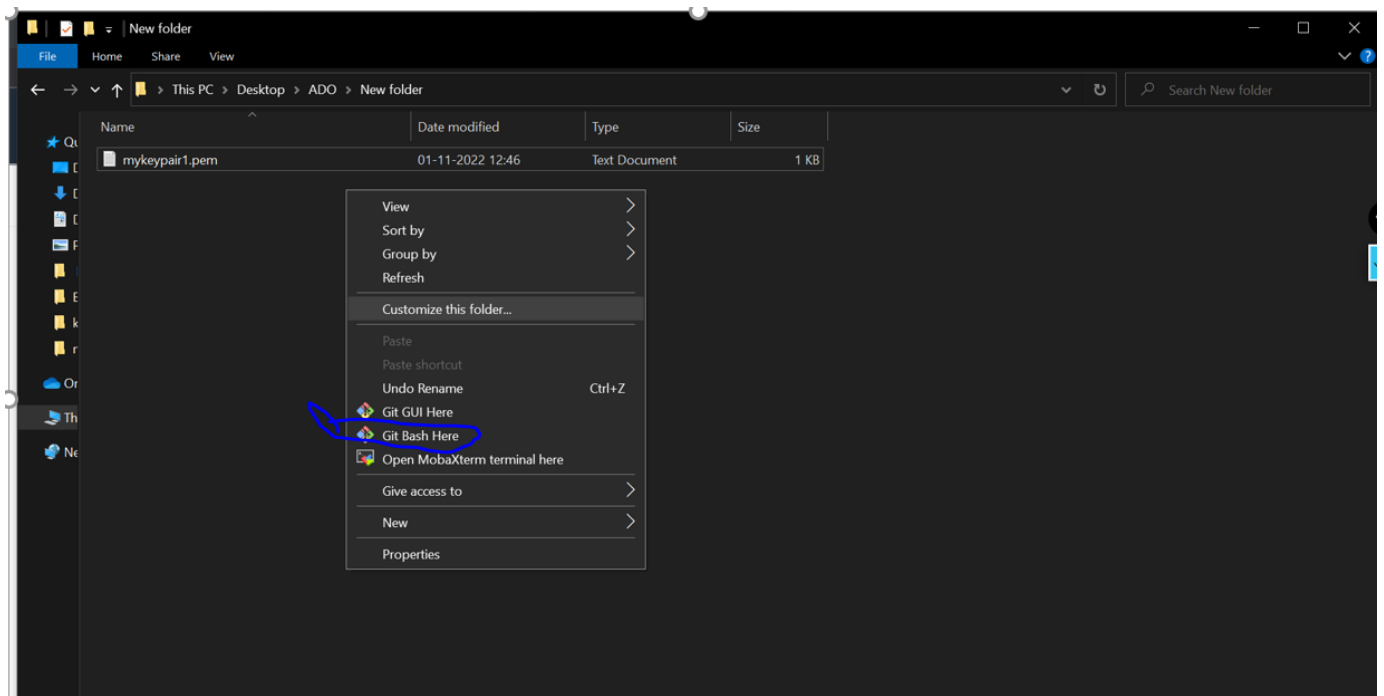
Click on instance name & select connect option



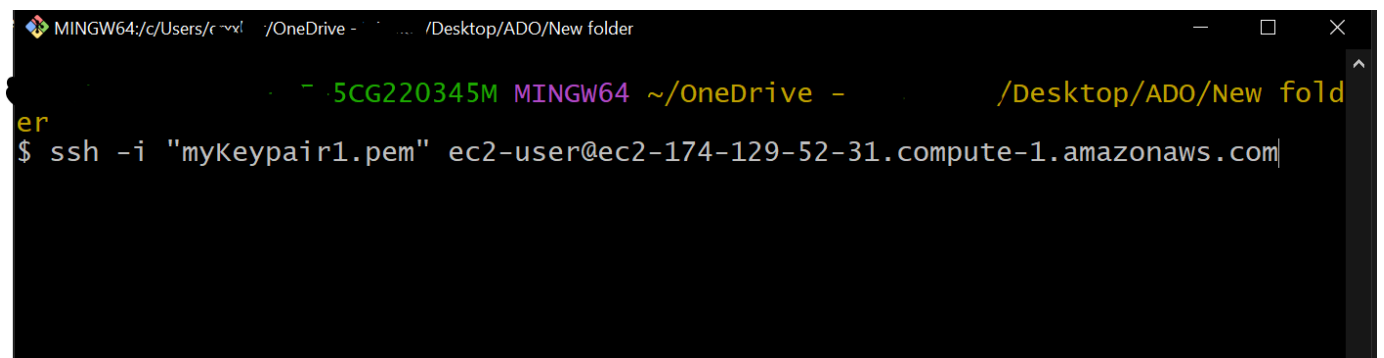
Copy command under example as highlighted below



Go to folder where you have downloaded your key file & right click on blank space & select git bash here option as below



Paste the command as copied from , paste & press enter



Select yes & you are connected to EC2-instance....

If your connected successfully you should see something like this

```
ec2-user@ip-172-31-93-35:~$ ssh -i "classes_keypair.pem" ec2-user@ec2-44-203-151-39.compute-1.amazonaws.com
MINGW64 ~/Desktop/July 2022
$ ssh -i "classes_keypair.pem" ec2-user@ec2-44-203-151-39.compute-1.amazonaws.com
The authenticity of host 'ec2-44-203-151-39.compute-1.amazonaws.com (44.203.151.39)' can't be established.
ED25519 key fingerprint is SHA256:zI/zpJtF4qonygC0drWEMS7gq81gX2L8EFtCAYZQOuU.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-44-203-151-39.compute-1.amazonaws.com' (ED25519)
to the list of known hosts.

  _ | _ | _ )
  _ | ( _ | /
  _ | \ _ | _ |
                Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-93-35 ~]$
```

FYI:

Please stop instances when your are not using the servers

Connection Flow diagram

