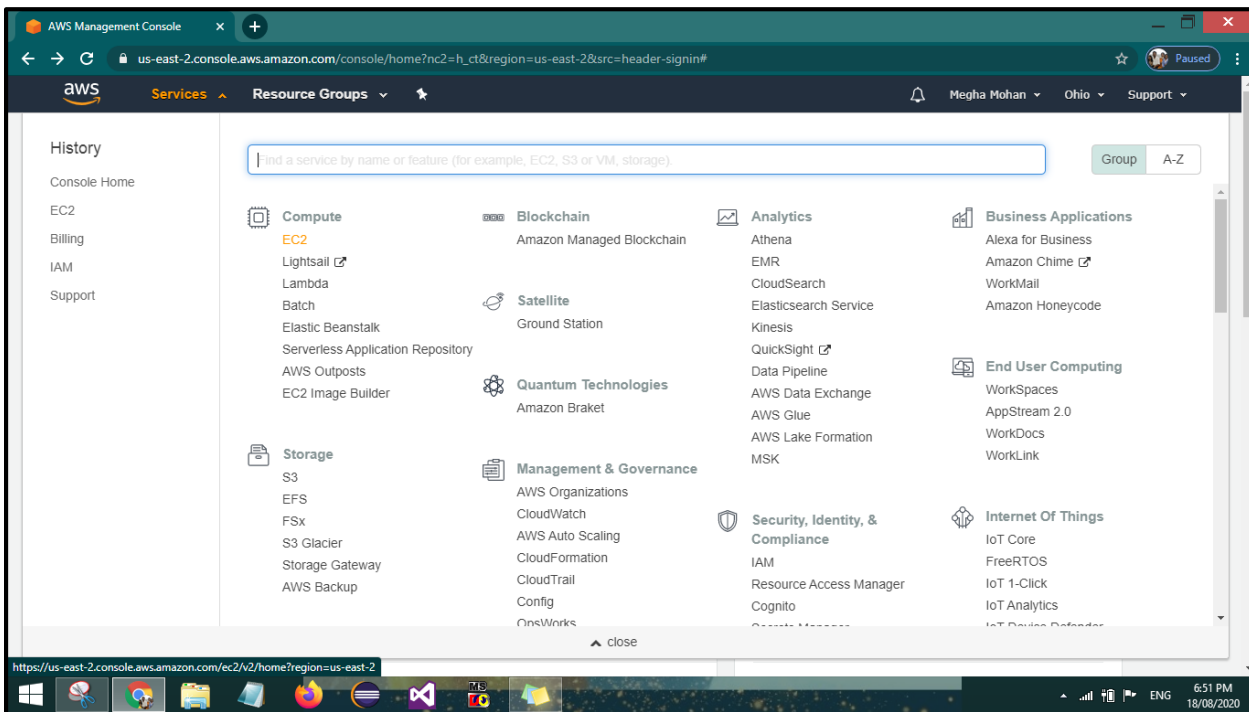


# DAY-3 ASSIGNMENT

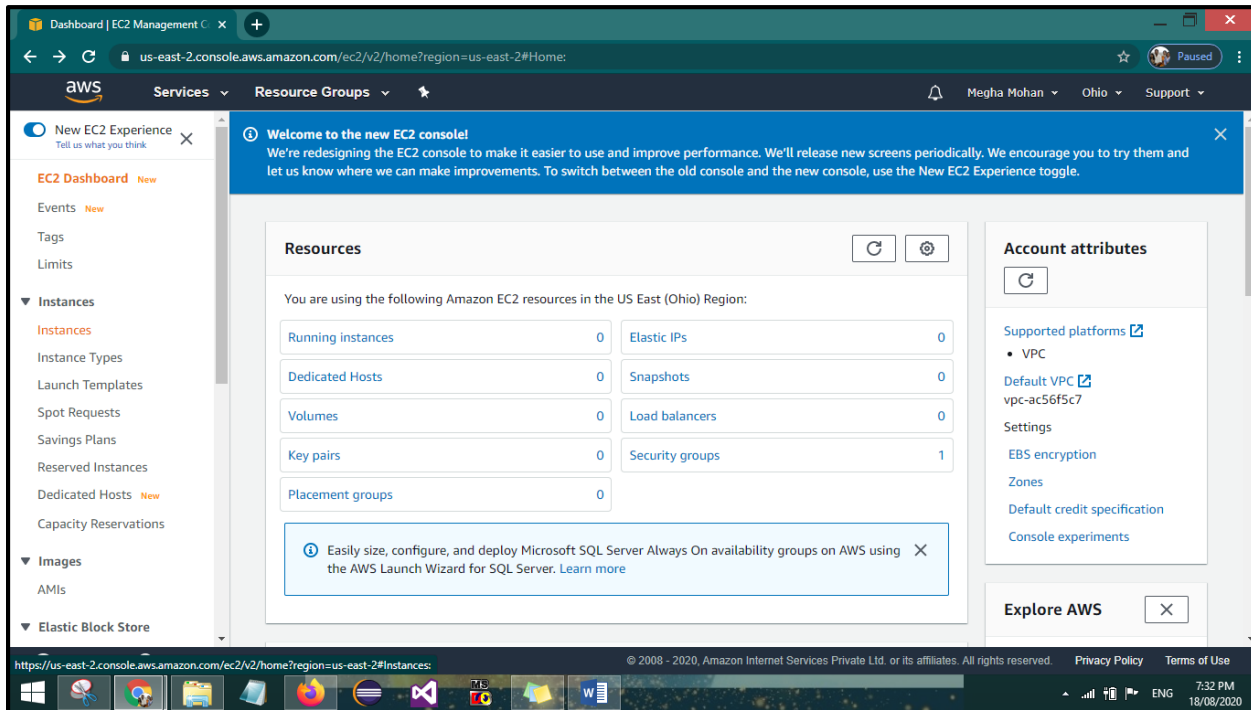
## UBUNTU

### STEPS:

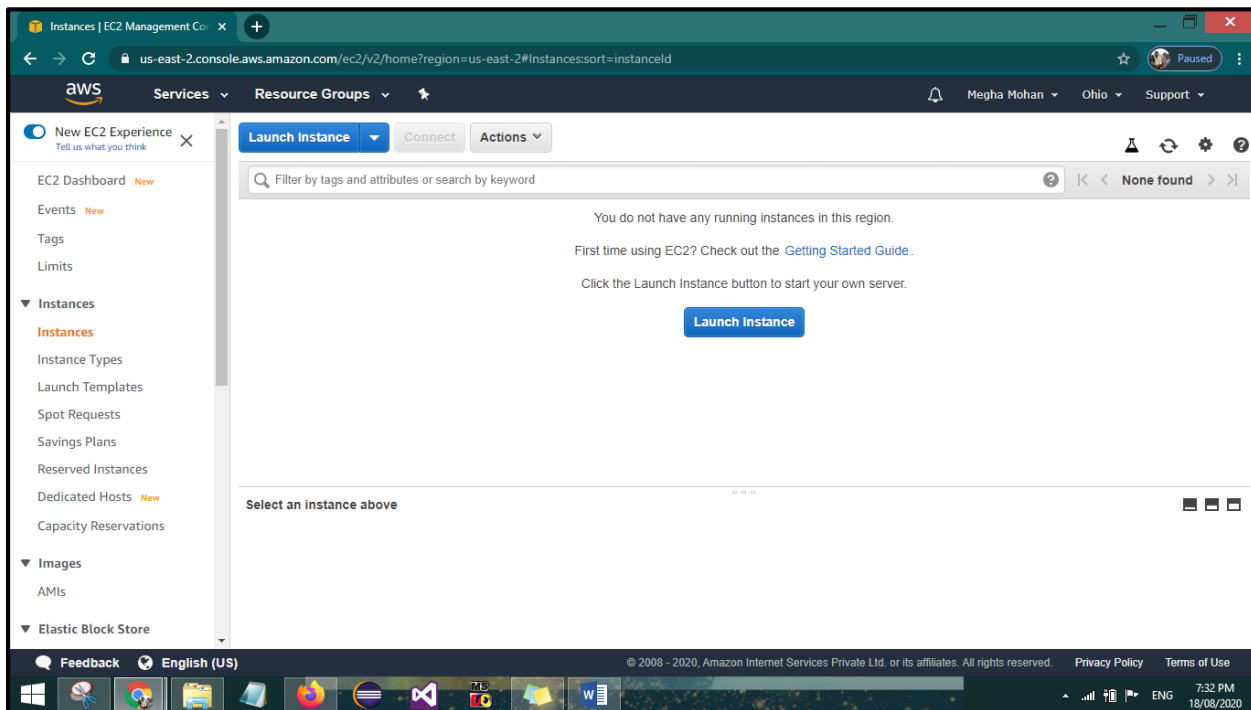
1. Open Aws Management Console
2. Click On Ec2



### 3. On The Right Sidebar Click On Instances



### 4. Now Click On Launch Instance



## 5. Select Ubuntu Server 16.04 LTS(HVM)

Launch instance wizard | EC2 M... x +

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

Step 1: Choose an Amazon Machine Image (AMI)

Cancel and Exit

**Windows** Free tier eligible  
Microsoft Windows Server 2016 Datacenter edition, Microsoft SQL Server 2019 Standard. [English]  
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes  
64-bit (x86) **Select**

**SUSE Linux** Free tier eligible  
SUSE Linux Enterprise Server 12 Service Pack 5 (HVM), EBS General Purpose (SSD) Volume Type. Public Cloud, Advanced Systems Management, Web and Scripting, and Legacy modules enabled.  
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes  
64-bit (x86) **Select**

**Ubuntu Server 16.04 LTS (HVM), SSD Volume Type** - ami-06817f01dcc7f30be (64-bit x86) / ami-02ee7191bf040b00 (64-bit Arm)  
Free tier eligible  
Ubuntu Server 16.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).  
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes  
64-bit (x86) **Select**

**Windows** Free tier eligible  
Microsoft Windows Server 2012 R2 Standard edition, 64-bit architecture, Microsoft SQL Server 2016 Standard edition. [English]  
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes  
64-bit (x86) **Select**

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## 6. Select The General Purpose Family For Free Tier

## 7. Click On Next: Configure Instance Details

Launch instance wizard | EC2 M... x +

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: All instance types Current generation Show/Hide Columns

Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	General purpose	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.small	1	2	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.large	2	8	EBS only	-	Low to Moderate	Yes

Cancel Previous **Review and Launch** Next: Configure Instance Details

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## 8. No Changes Are Required So, Click On Next: Add Storage

The screenshot shows the AWS Launch Instance Wizard at Step 3: Configure Instance Details. The wizard is for an EC2 instance in the us-east-2 region. The steps are: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags, 6. Configure Security Group, 7. Review. The current step is Step 3.

**Step 3: Configure Instance Details**  
Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

**Number of instances** 1 [Launch into Auto Scaling Group](#)

**Purchasing option** ☐ Request Spot Instances

**Network** vpc-ac56f5c7 (default) [Create new VPC](#)

**Subnet** No preference (default subnet in any Availability Zone) [Create new subnet](#)

**Auto-assign Public IP** Use subnet setting (Enable)

**Placement group** ☐ Add instance to placement group

**Capacity Reservation** Open

**IAM role** None [Create new IAM role](#)

**Shutdown behavior** Stop

**Stop, Hibernate behavior** ☐ Enable hibernation as an additional state behavior

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Add Storage](#)

## 9. No Changes Are Required So Click On Next: Add Tags

The screenshot shows the AWS Launch Instance Wizard at Step 4: Add Storage. The wizard is for an EC2 instance in the us-east-2 region. The steps are: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags, 6. Configure Security Group, 7. Review. The current step is Step 4.

**Step 4: Add Storage**  
Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encryption
Root	/dev/sda1	snap-09c363b058b9bf08	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypt

[Add New Volume](#)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Add Tags](#)

## 10. If You Want You Can Add Name Tag Such As 'Ubuntu' And Then Click On Next: Configure Security Groups

Launch instance wizard | EC2 M...

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### Step 5: Add Tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver. A copy of a tag can be applied to volumes, instances or both. Tags will be applied to all instances and volumes. [Learn more](#) about tagging your Amazon EC2 resources.

Key (128 characters maximum)	Value (256 characters maximum)	Instances	Volumes
Name	ubuntu	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Add another tag (Up to 50 tags maximum)

Cancel Previous Review and Launch Next: Configure Security Group

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## 11. In The Type Dropdown Change To All Traffic And In Source Select Anywhere

## 12. Click On Review And Launch

Launch instance wizard | EC2 M...

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group: ☒ Create a new security group ☐ Select an existing security group

Security group name: launch-wizard-2

Description: launch-wizard-2 created 2020-08-18T23:25:11.654+05:30

Type	Protocol	Port Range	Source	Description
All traffic	All	0 - 65535	Anywhere 0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop

Add Rule

**Warning**  
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.

Cancel Previous Review and Launch

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### 13. Click On Launch

Launch instance wizard | EC2 M... x +

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### Step 7: Review Instance Launch

AMI Details [Edit AMI](#)

**Ubuntu Server 16.04 LTS (HVM), SSD Volume Type - ami-06817f01dcc7f30be**

Free tier eligible

Ubuntu Server 16.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Root Device Type: ebs Virtualization type: hvm

Instance Type [Edit instance type](#)

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.micro	Variable	1	1	EBS only	-	Low to Moderate

Security Groups [Edit security groups](#)

Security group name: launch-wizard-2

Description: launch-wizard-2 created 2020-08-18T23:25:11.654+05:30

[Cancel](#) [Previous](#) [Launch](#)

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### 14. You Can Create A New Key Pair Or Can Use Previous Key, For Using Previous Key Select Choose An Existing Key Pair

### 15. Click On I Acknowledge....

### 16. Click On Launch Instances

Launch instance wizard | EC2 M... x +

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### Step 7: Review Instance Launch

Instance Type ECUs vCPUs

Instance Type	ECUs	vCPUs
t2.micro	Variable	1

Security Groups [Edit security groups](#)

Security group name: launch-wizard-2

Description: launch-wizard-2

Type: All traffic

Instance Details

Storage

Tags

[Cancel](#) [Previous](#) [Launch](#)

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#### Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Choose an existing key pair

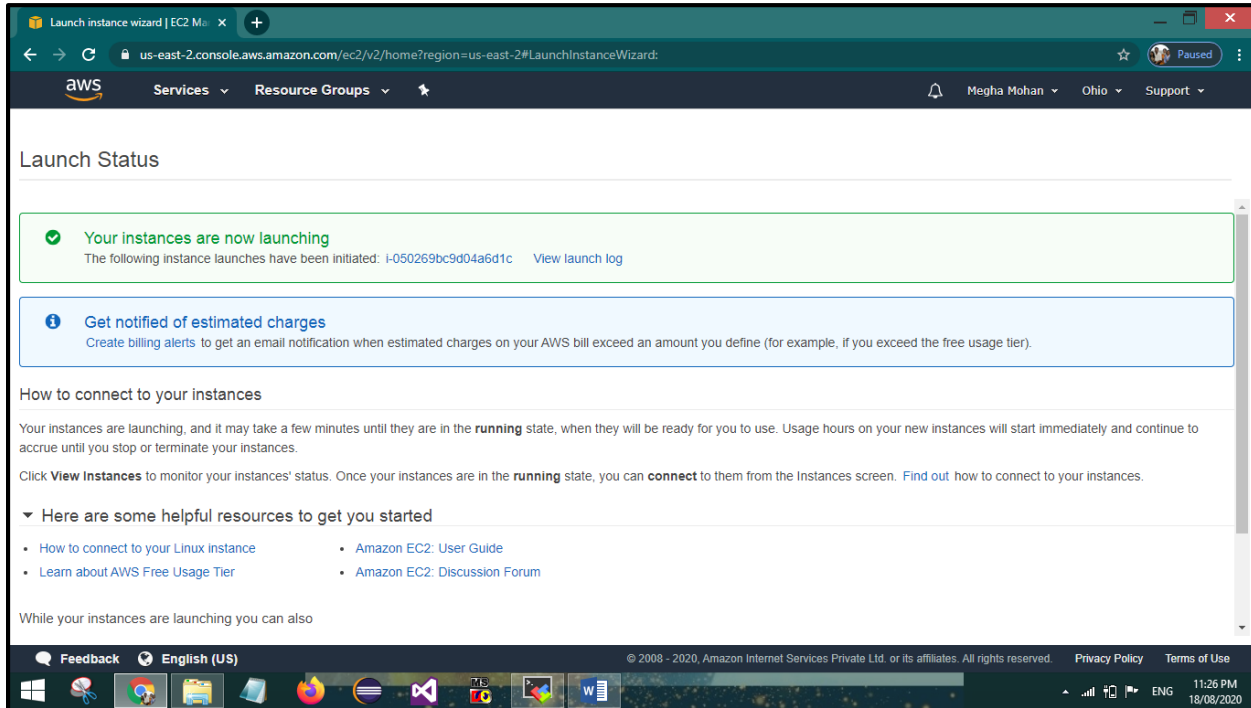
Select a key pair

letsupgrade

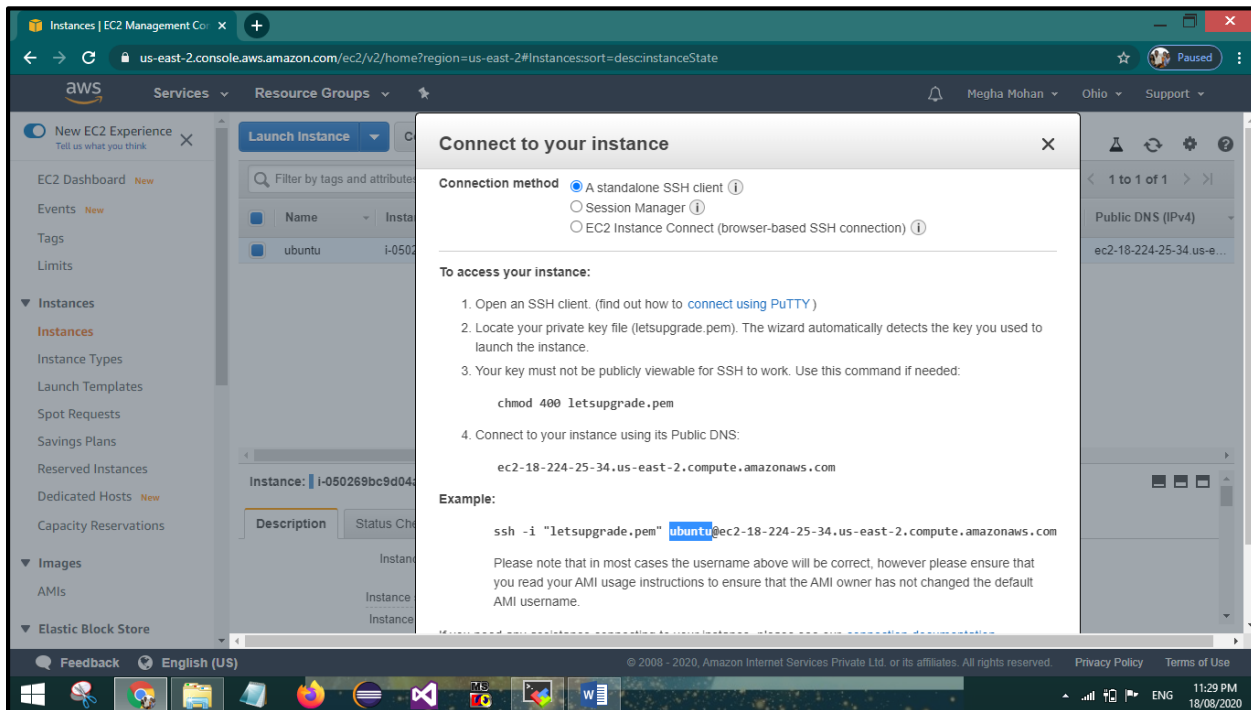
☒ I acknowledge that I have access to the selected private key file (letsupgrade.pem), and that without this file, I won't be able to log into my instance.

[Cancel](#) [Launch Instances](#)

## 17. Open The Link Next To View Launch Tags

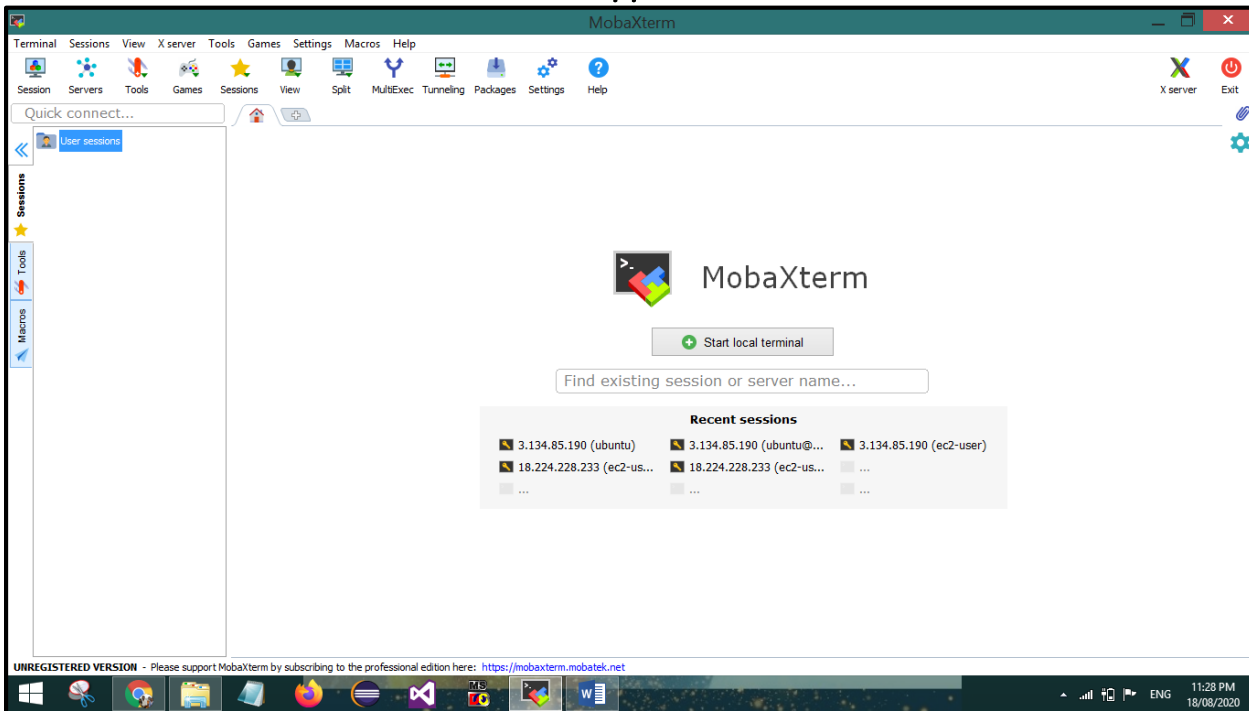


## 18. You Can See The Instance Initializing, Let It Complete Initialization



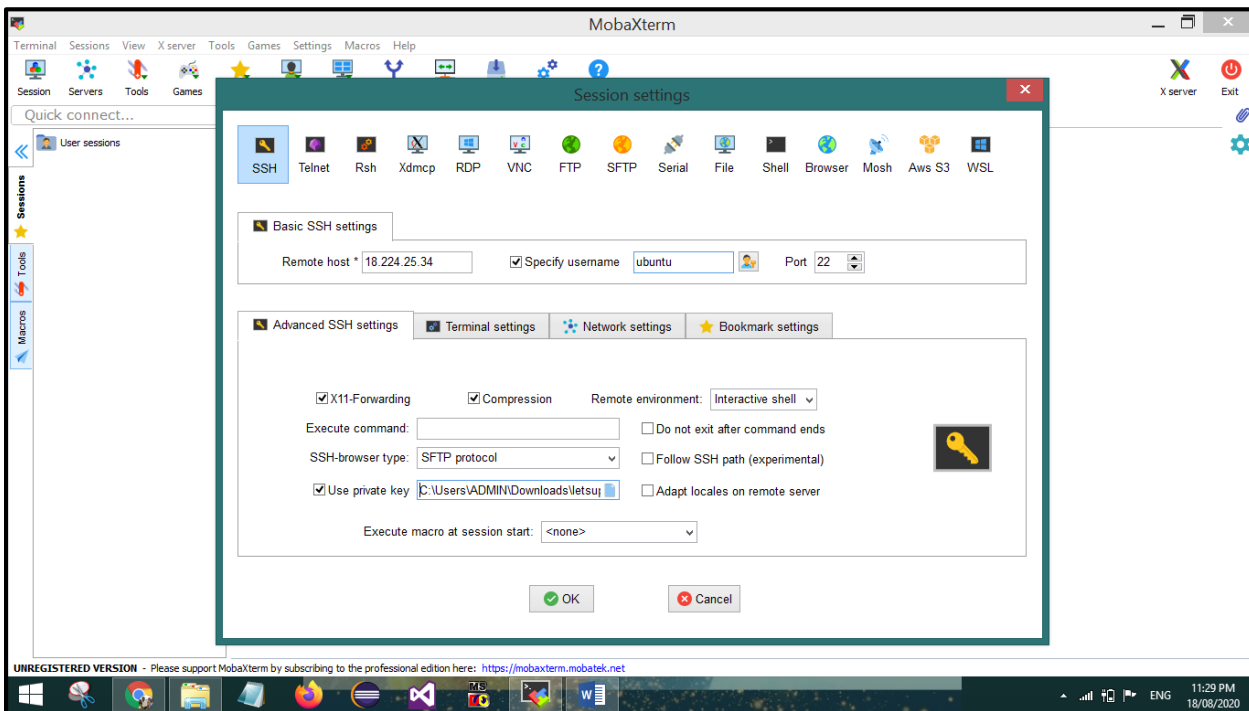
## 19. Download MobaXterm

## 20. Extract All The File And Run The Application



## 21. Click On Session

## 22. Select SSH

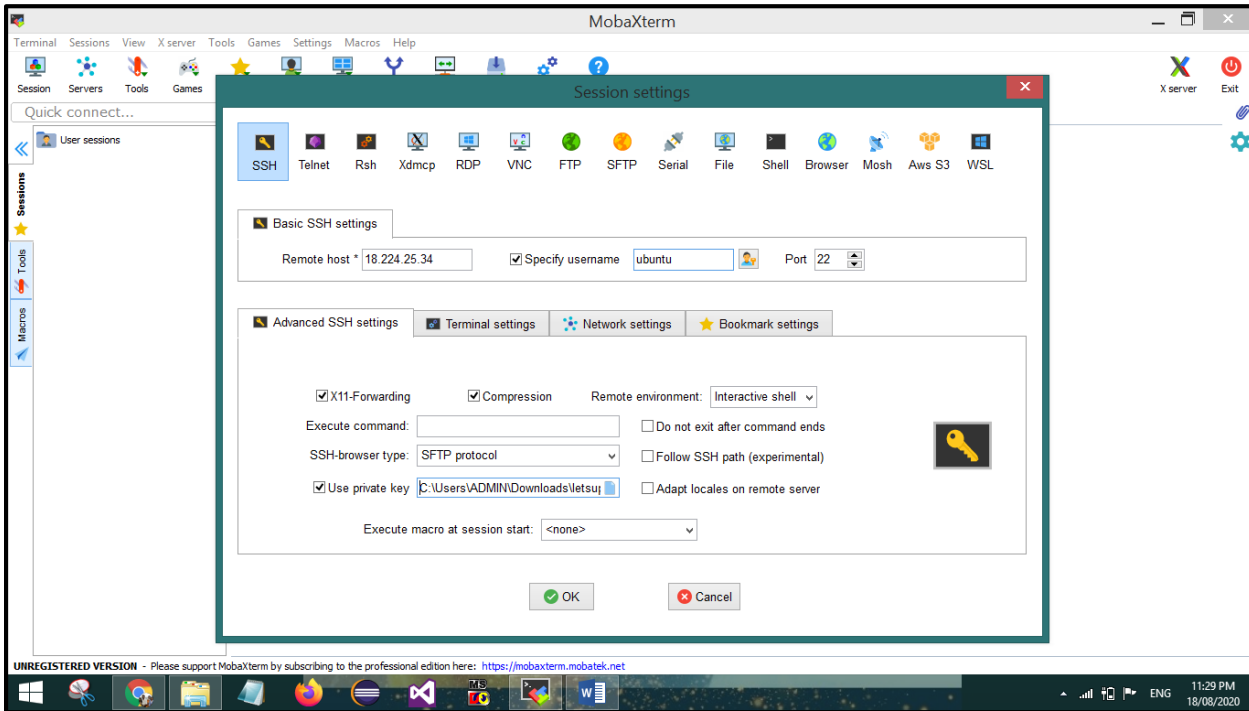




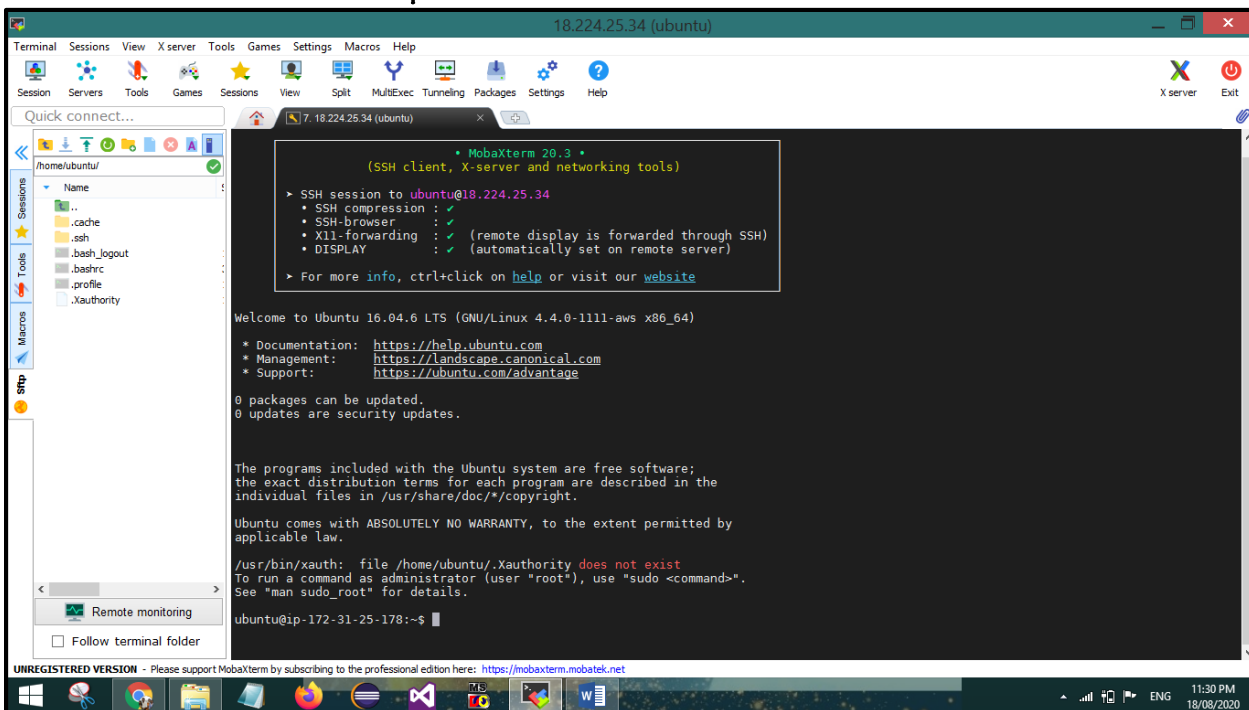
23. Copy The Instance Ipv4 Address And Paste In Remote Host And Give Username As Ubuntu

24. Click On Advanced SSH Settings Check Use Private Key And Open The .pem File

25. Click On Ok



26. Ubuntu Instance Will Open



## 27. Write The Following Code

**Sudo Apt-Get -Y Update**

**Sudo Apt-Get -Y Install Nginx**

```

18.224.25.34 (ubuntu)
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help
Quick connect...
/home/ubuntu/
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.
/usr/bin/xauth: file /home/ubuntu/.Xauthority does not exist
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
ubuntu@ip-172-31-25-178:~$ sudo apt-get -y update
Get:1 http://security.ubuntu.com/ubuntu xenial-security InRelease [109 kB]
Hit:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial InRelease
Get:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease [109 kB]
Get:4 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease [107 kB]
Get:5 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial/universe amd64 Packages [7,532 kB]
Get:6 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial/universe Translation-en [4,354 kB]
Get:7 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial/multiverse amd64 Packages [144 kB]
Get:8 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial/multiverse Translation-en [106 kB]
Get:9 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 Packages [1,184 kB]
Get:10 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main Translation-en [444 kB]
Get:11 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/universe amd64 Packages [803 kB]
Get:12 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/universe Translation-en [337 kB]
Get:13 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/multiverse amd64 Packages [17.1 kB]
Get:14 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/multiverse Translation-en [8,632 B]
Get:15 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-backports/main amd64 Packages [7,280 B]
Get:16 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-backports/main Translation-en [4,456 B]
Get:17 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-backports/universe amd64 Packages [8,316 B]
Get:18 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-backports/universe Translation-en [4,476 B]
Get:19 http://security.ubuntu.com/ubuntu xenial-security/main amd64 Packages [912 kB]
Get:20 http://security.ubuntu.com/ubuntu xenial-security/main Translation-en [339 kB]
Get:21 http://security.ubuntu.com/ubuntu xenial-security/universe amd64 Packages [500 kB]
Get:22 http://security.ubuntu.com/ubuntu xenial-security/universe Translation-en [206 kB]
Get:23 http://security.ubuntu.com/ubuntu xenial-security/multiverse amd64 Packages [6,084 B]
Get:24 http://security.ubuntu.com/ubuntu xenial-security/multiverse Translation-en [2,888 B]
Fetched 17.2 MB in 3s (4,803 kB/s)
Reading package lists... Done
ubuntu@ip-172-31-25-178:~$
  
```

```

18.224.25.34 (ubuntu)
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help
Quick connect...
/home/ubuntu/
Reading package lists... Done
ubuntu@ip-172-31-25-178:~$ sudo apt-get -y install nginx
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  fontconfig-config fonts-dejavu-core libfontconfig1 libgd3 libjpeg-turbo8 libjpeg8 libtiff5 libvpx3 libxpm4 nginx-common
  nginx-core
Suggested packages:
  libgd-tools fcgiwrap nginx-doc ssl-cert
The following NEW packages will be installed:
  fontconfig-config fonts-dejavu-core libfontconfig1 libgd3 libjpeg-turbo8 libjpeg8 libtiff5 libvpx3 libxpm4 nginx
  nginx-common nginx-core
0 upgraded, 13 newly installed, 0 to remove and 13 not upgraded.
Need to get 2,860 kB of archives.
After this operation, 9,315 kB of additional disk space will be used.
Get:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 libjpeg-turbo8 amd64 1.4.2-0ubuntu3.4 [111 kB]
Get:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 libjpeg8 amd64 2.1-3.1 [26.6 kB]
Get:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 fonts-dejavu-core all 2.35-1 [1,039 kB]
Get:4 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 fontconfig-config all 2.11.94-0ubuntu1.1 [49.9 kB]
Get:5 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 libfontconfig1 amd64 2.11.94-0ubuntu1.1 [131 kB]
Get:6 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial/main amd64 libjpeg8 amd64 9c-2ubuntu8 [2,194 B]
Get:7 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 libtiff5 amd64 4.0.6-1ubuntu0.7 [149 kB]
Get:8 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 libvpx3 amd64 1.5.0-2ubuntu1.1 [732 kB]
Get:9 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 libxpm4 amd64 1:3.5.11-1ubuntu0.16.04.1 [33.8 kB]
Get:10 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 libgd3 amd64 2.1.1-4ubuntu0.16.04.12 [126 kB]
Get:11 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 nginx-common all 1.10.3-0ubuntu0.16.04.5 [26.9 kB]
Get:12 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 nginx-core amd64 1.10.3-0ubuntu0.16.04.5 [429 kB]
Get:13 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 nginx all 1.10.3-0ubuntu0.16.04.5 [3,494 B]
Fetched 2,860 kB in 0s (26.6 MB/s)
Preconfiguring packages ...
Selecting previously unselected package libjpeg-turbo8:amd64.
(Reading database ... 51436 files and directories currently installed.)
Preparing to unpack .../libjpeg-turbo8_1.4.2-0ubuntu3.4_amd64.deb ...
Unpacking libjpeg-turbo8:amd64 (1.4.2-0ubuntu3.4) ...
Selecting previously unselected package libjpeg8:amd64.
Preparing to unpack .../libjpeg8_2.1-3.1_amd64.deb ...
Unpacking libjpeg8:amd64 (2.1-3.1) ...
  
```

28. Now On New Tab Paste Ipv4 Address Of The Instance

29. You Will Be Able To See Nginx

