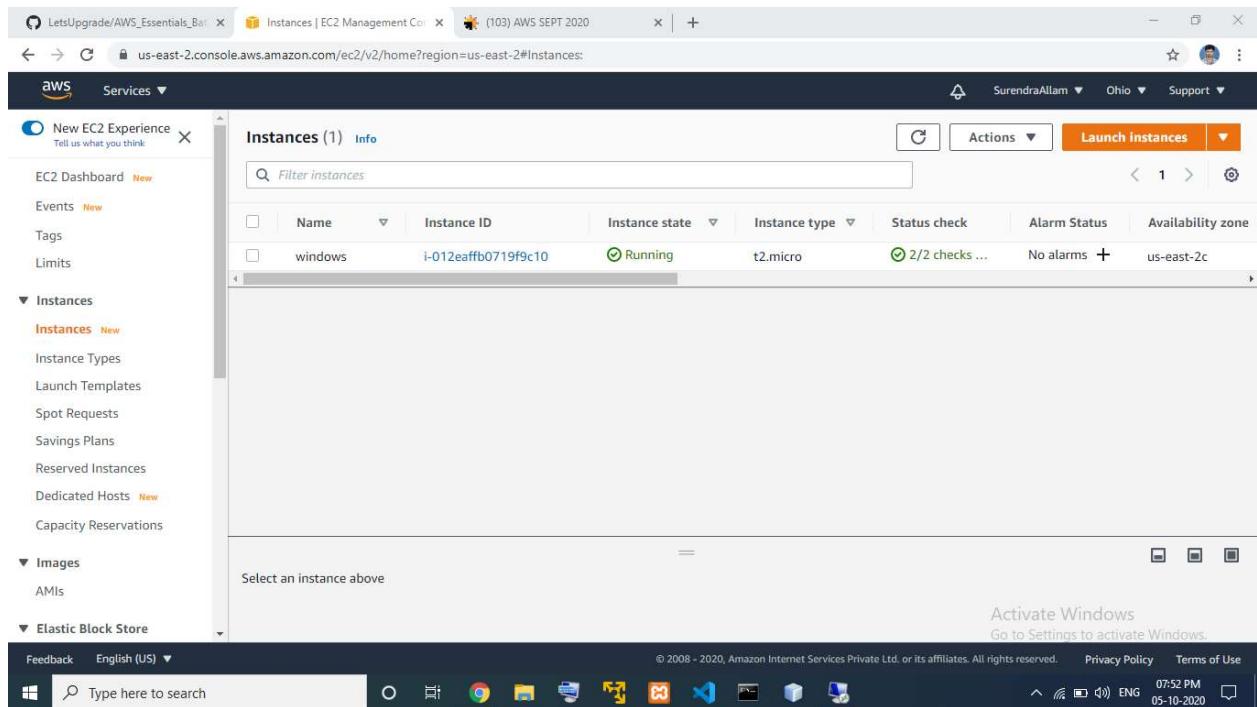


Advance AWS | Assignment Day 3 and 4

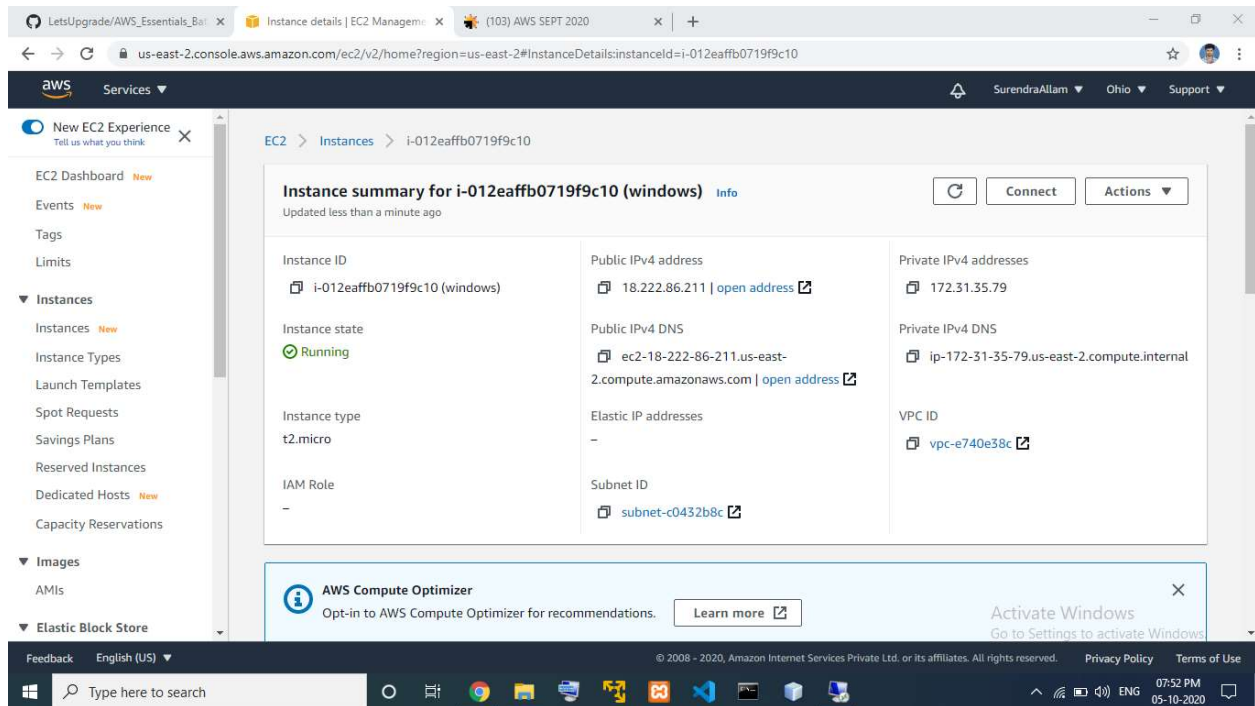
PROJECT 1:

Deploying a web server in Windows instance

Task 1: Create a windows instance using AMI: Windows 2012 R2 base



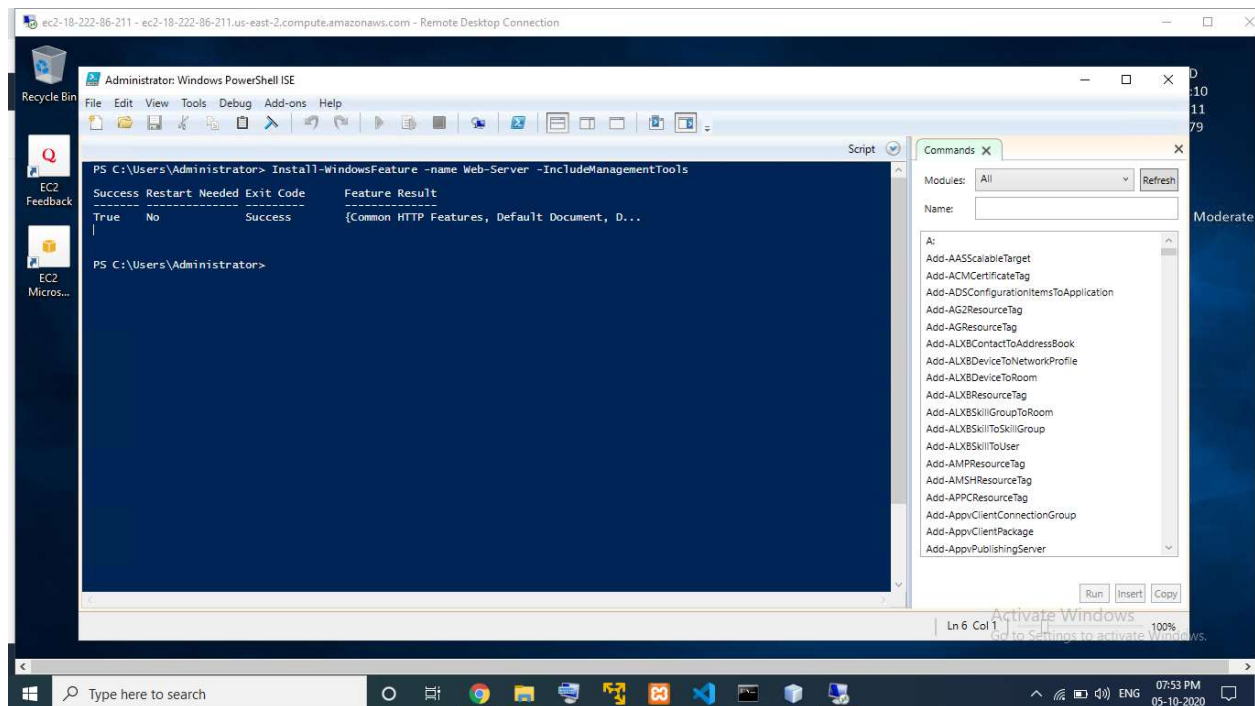
Task 2: Launch the Windows instance using RDP



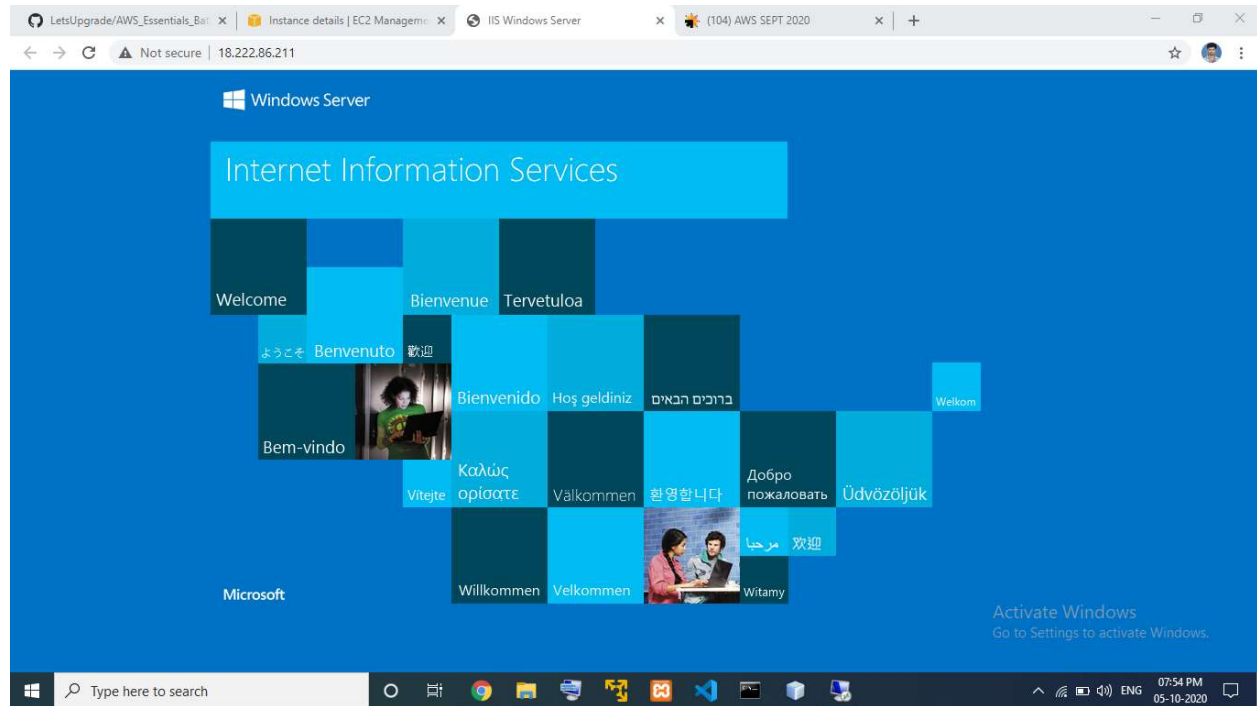
Task 3: Install IIS web server using Powershell ISE

cmd:

> Install-WindowsFeature -name Web-Server -IncludeManagementTools



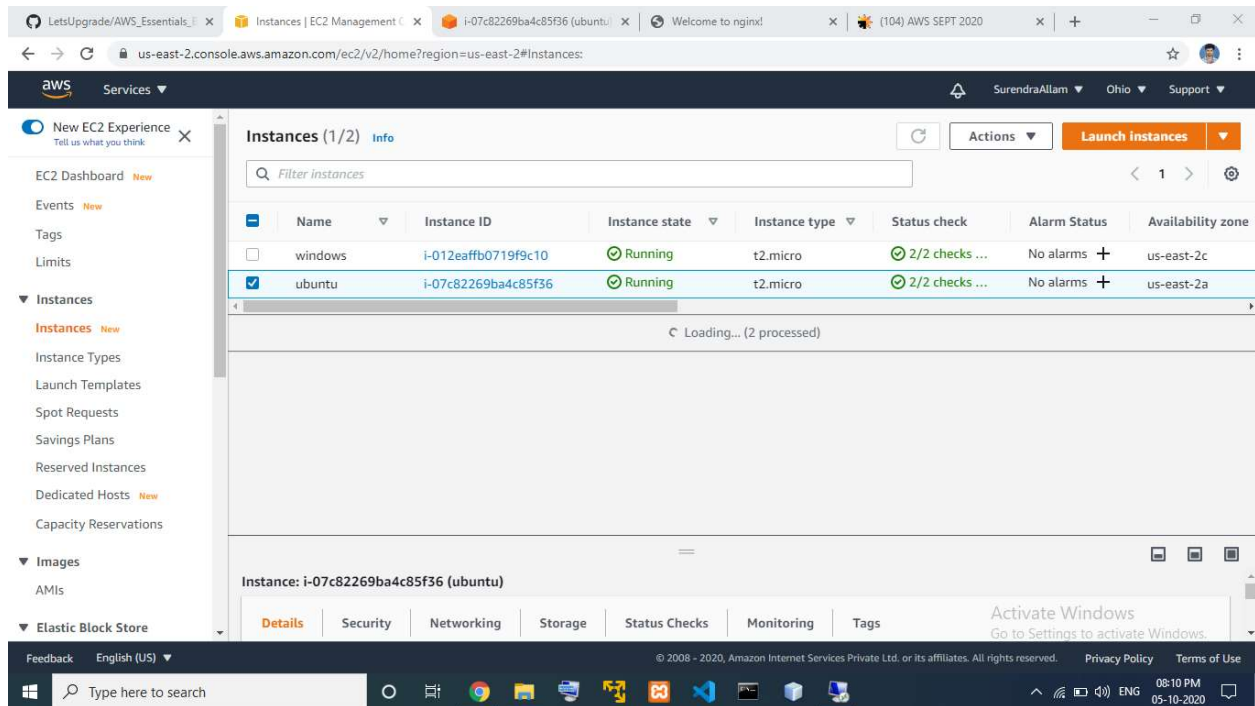
Task 4: Verify successful installation of IIS Web Server



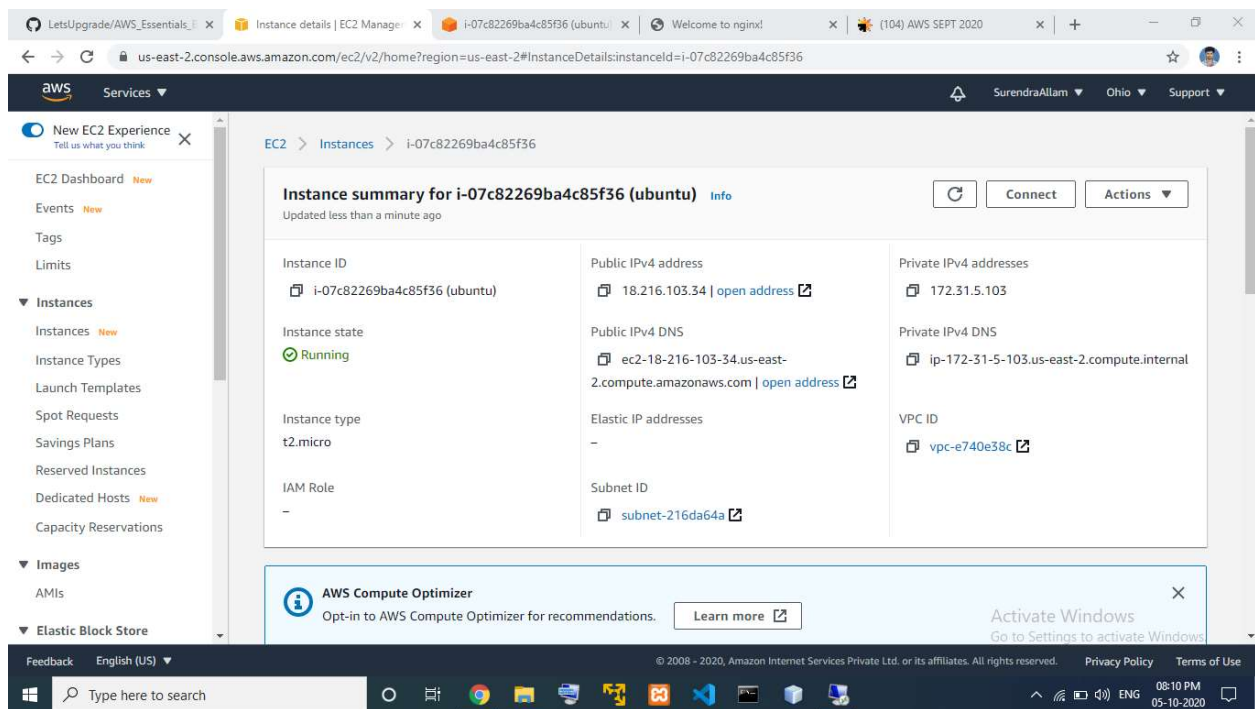
PROJECT 2:

Deploying a web server in Linux instance

Task 1: Create a windows instance using AMI: Ubuntu Server 18.04 LTS (HVM)



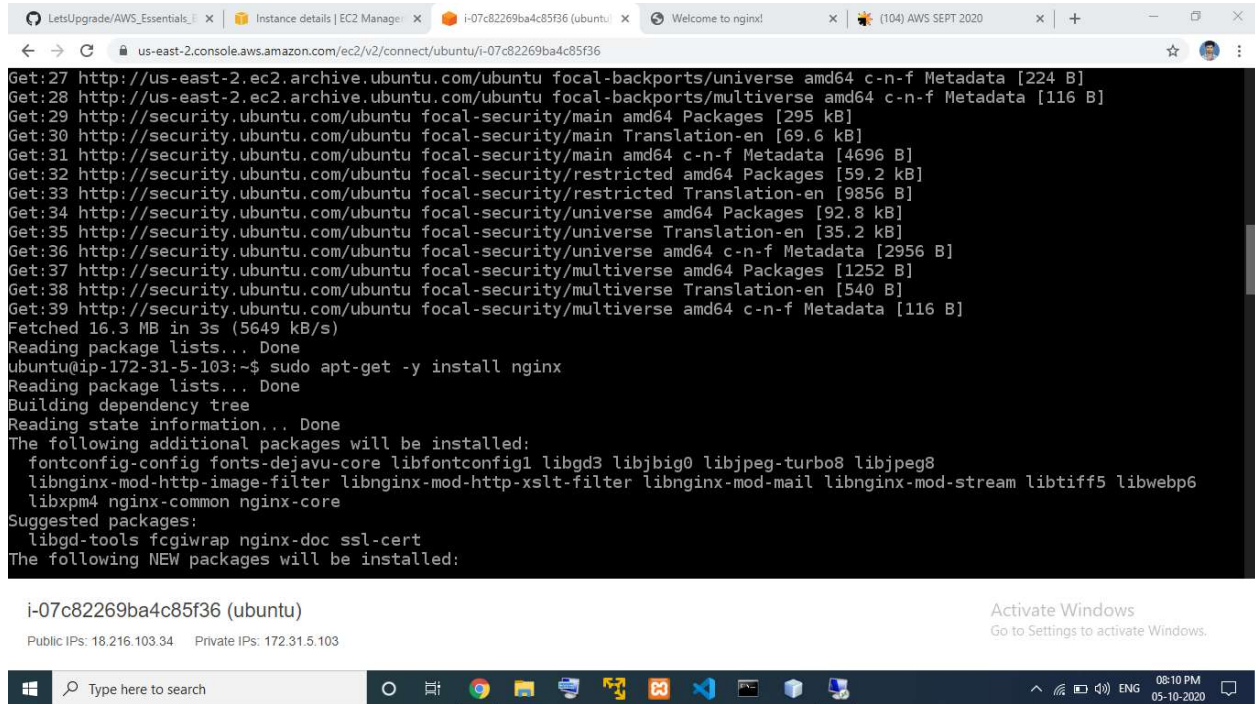
Task 2: Launch the Ubuntu instance using SSH



Task 3: Install Nginx web server using bash Cmd:

```
# sudo apt-get -y update
```

```
# sudo apt-get -y install nginx
```



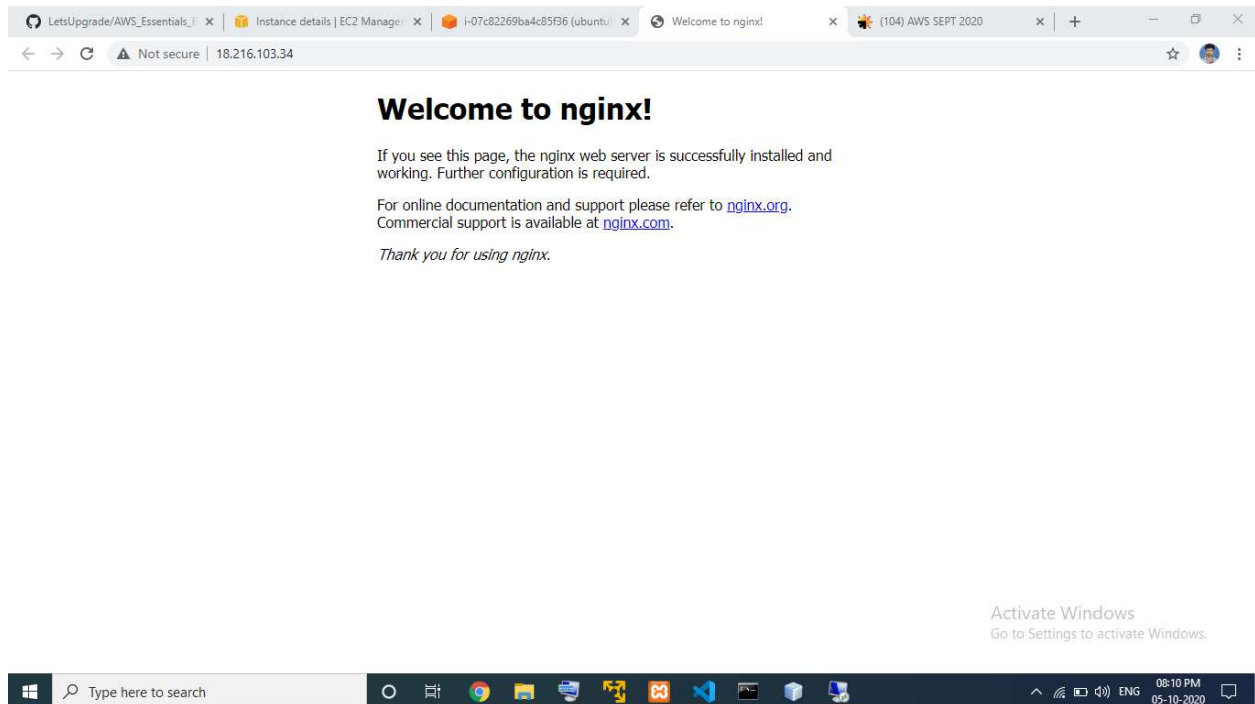
```
Get:27 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal-backports/universe amd64 c-n-f Metadata [224 B]
Get:28 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:29 http://security.ubuntu.com/ubuntu focal-security/main amd64 Packages [295 kB]
Get:30 http://security.ubuntu.com/ubuntu focal-security/main Translation-en [69.6 kB]
Get:31 http://security.ubuntu.com/ubuntu focal-security/main amd64 c-n-f Metadata [4696 B]
Get:32 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 Packages [59.2 kB]
Get:33 http://security.ubuntu.com/ubuntu focal-security/restricted Translation-en [9856 B]
Get:34 http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages [92.8 kB]
Get:35 http://security.ubuntu.com/ubuntu focal-security/universe Translation-en [35.2 kB]
Get:36 http://security.ubuntu.com/ubuntu focal-security/universe amd64 c-n-f Metadata [2956 B]
Get:37 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 Packages [1252 B]
Get:38 http://security.ubuntu.com/ubuntu focal-security/multiverse Translation-en [540 B]
Get:39 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 c-n-f Metadata [116 B]
Fetched 16.3 MB in 3s (5649 kB/s)
Reading package lists... Done
ubuntu@ip-172-31-5-103:~$ 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
  libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter libnginx-mod-mail libnginx-mod-stream libtiff5 libwebp6
  libxpm4 nginx-common nginx-core
Suggested packages:
  libgd-tools fcgiwrap nginx-doc ssl-cert
The following NEW packages will be installed:
```

i-07c82269ba4c85f36 (ubuntu)

Public IPs: 18.216.103.34 Private IPs: 172.31.5.103

Activate Windows
Go to Settings to activate Windows.

Task 4: Verify successful installation of nginx



```
Let's Upgrade/AWS_Essentials | Instance details | EC2 Manager | i-07c82269ba4c85f36 (ubuntu) | Welcome to nginx! | (104) AWS SEPT 2020
```

Not secure | 18.216.103.34

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

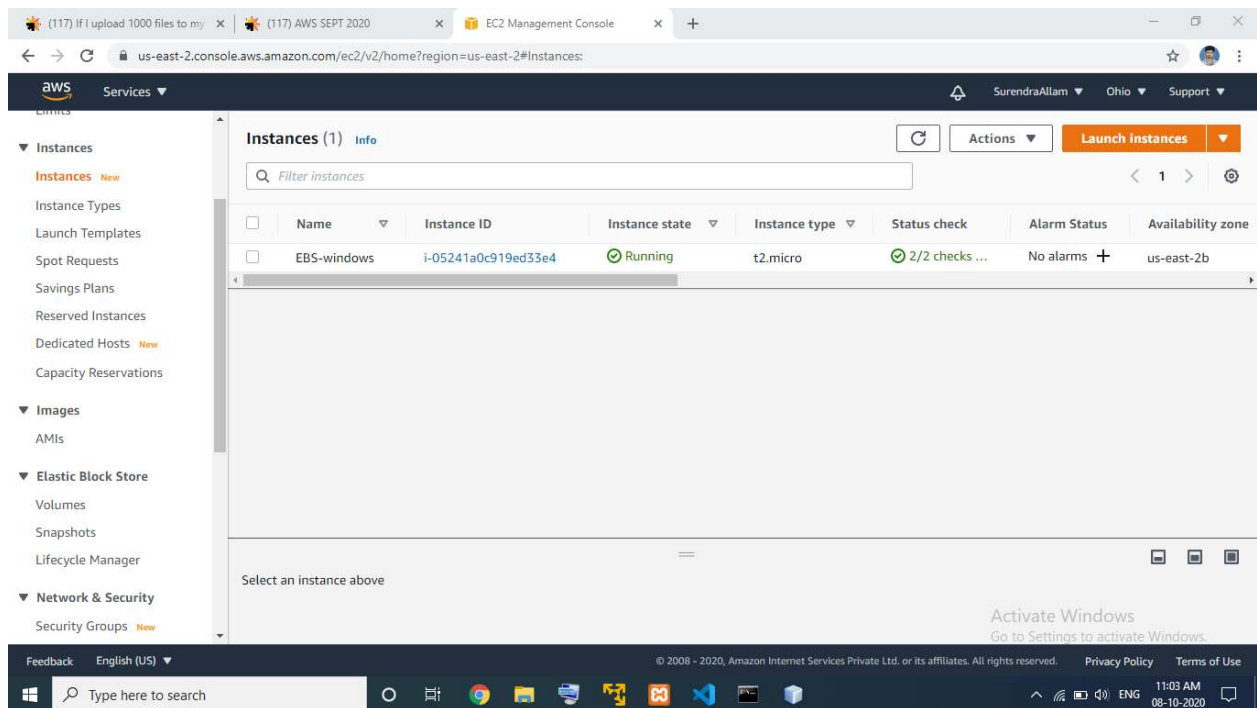
Thank you for using nginx.

Activate Windows
Go to Settings to activate Windows.

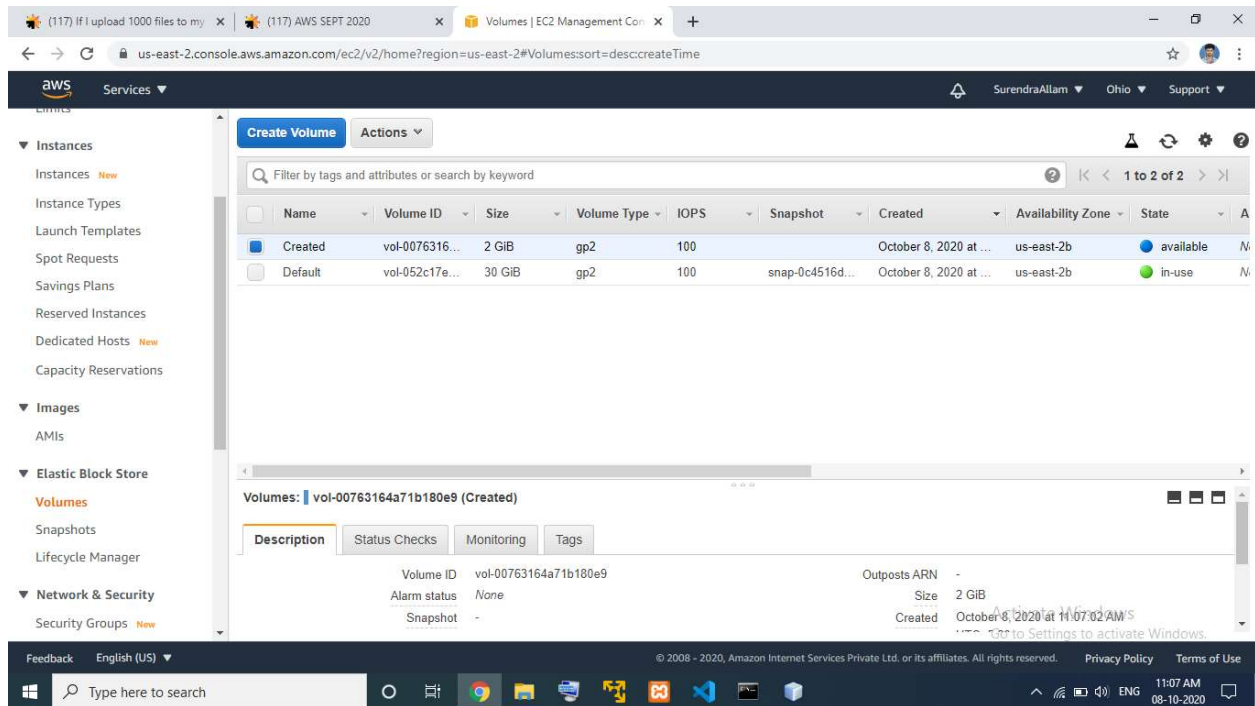
PROJECT 3:

Working with volumes

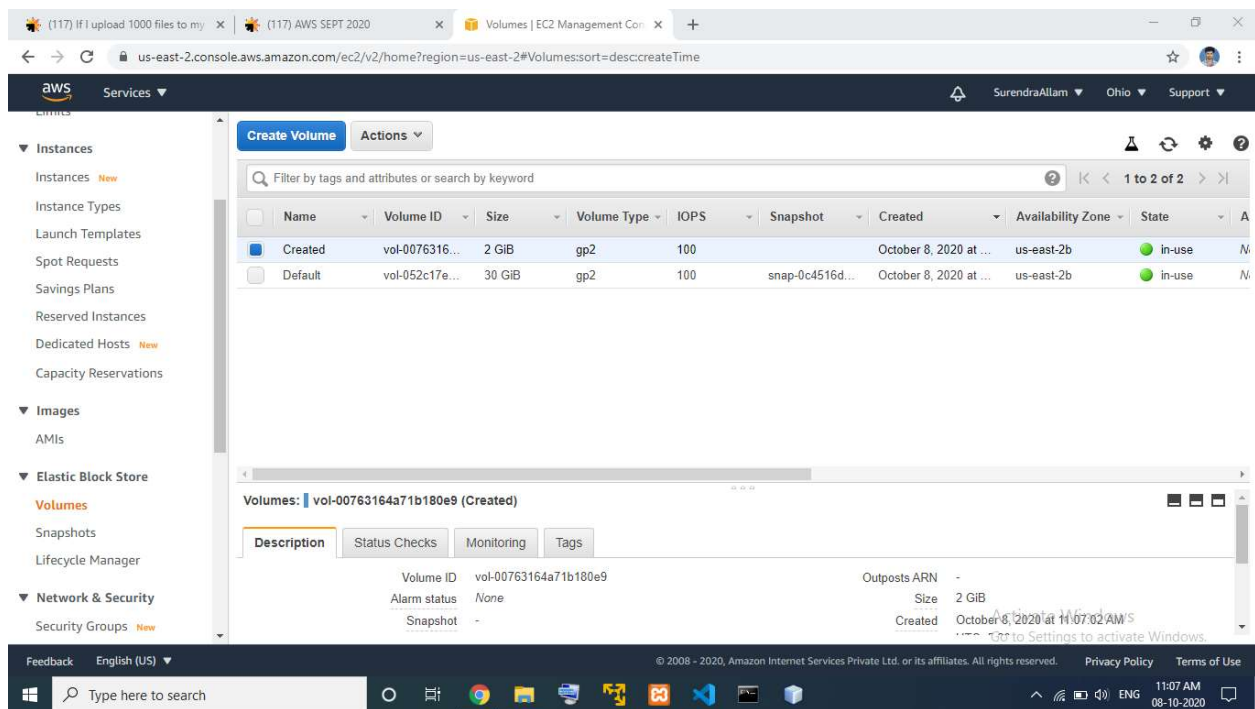
1: Create a windows machine



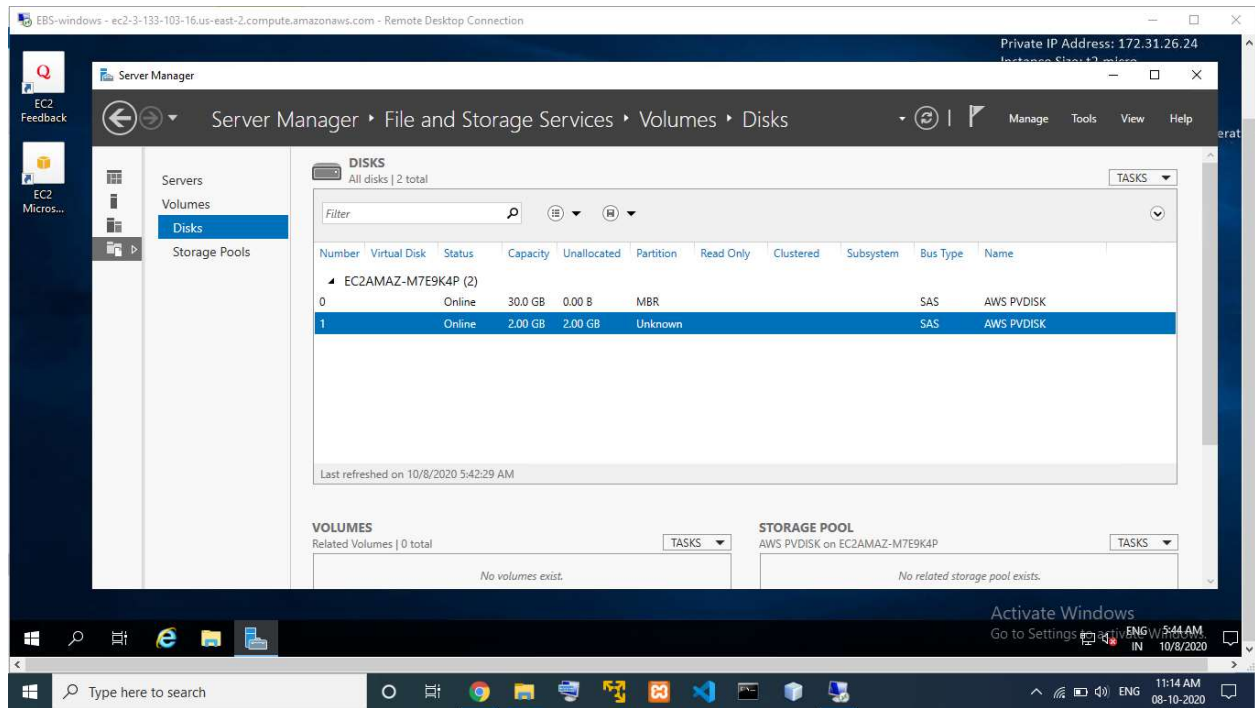
2: Create a volume in the same region as the windows machine



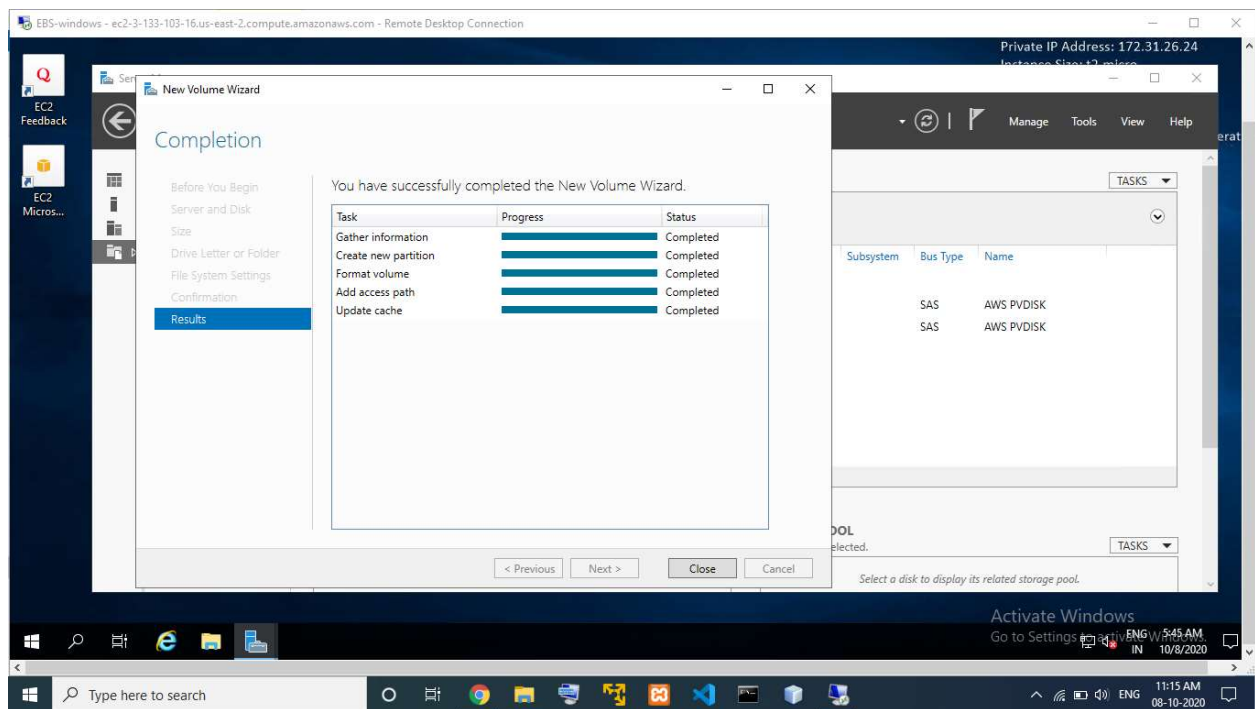
3: Attach the volume to the windows machine



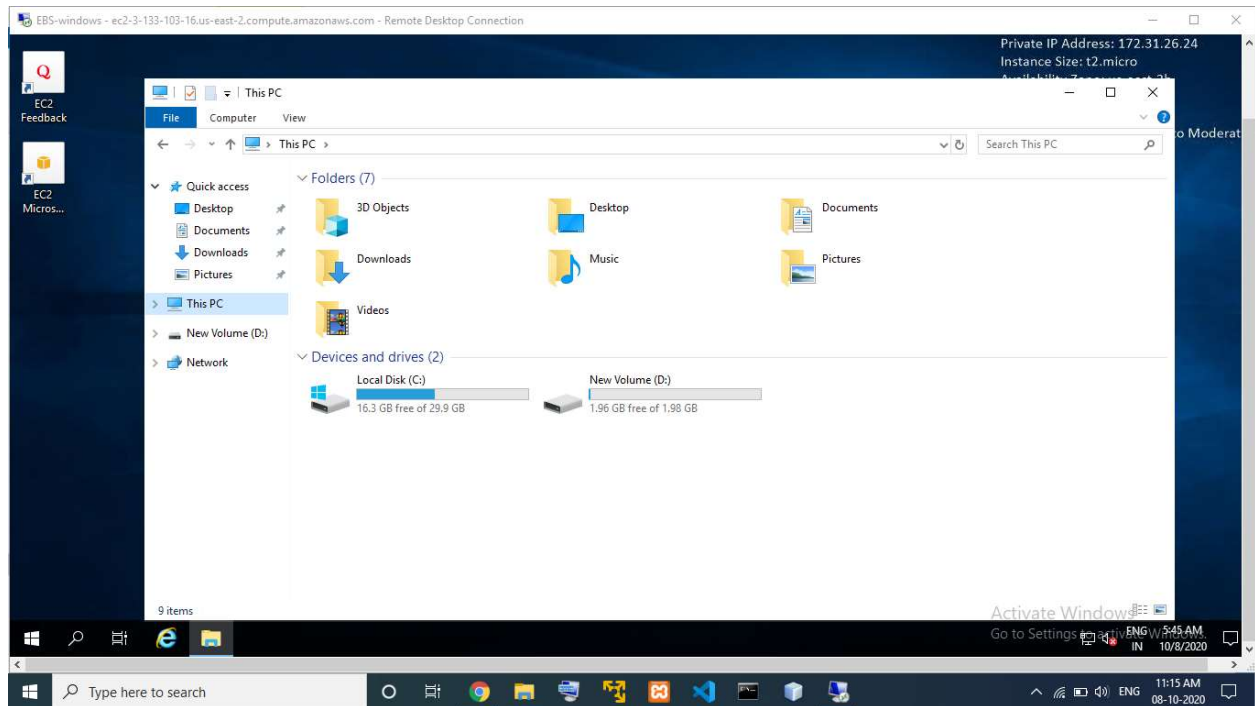
4: From server manager bring the volume online



5: Once the ebs is online create a new volume

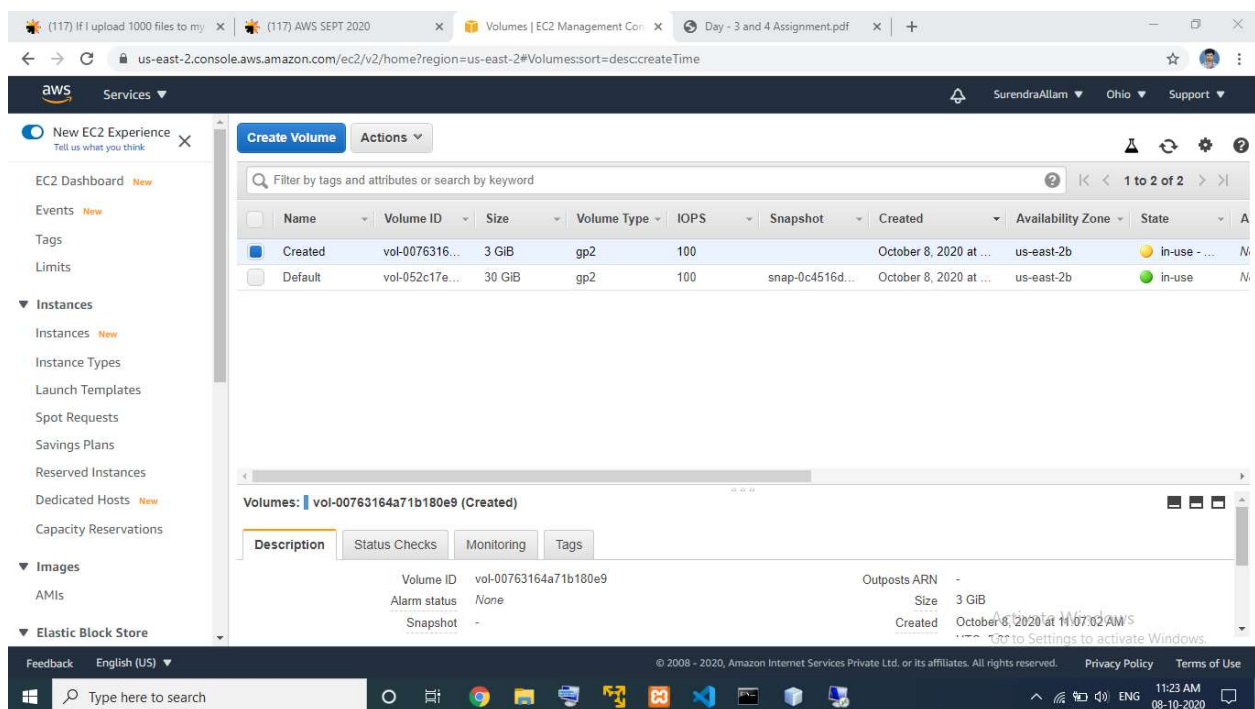


6: Check if the volume is mounted successfully

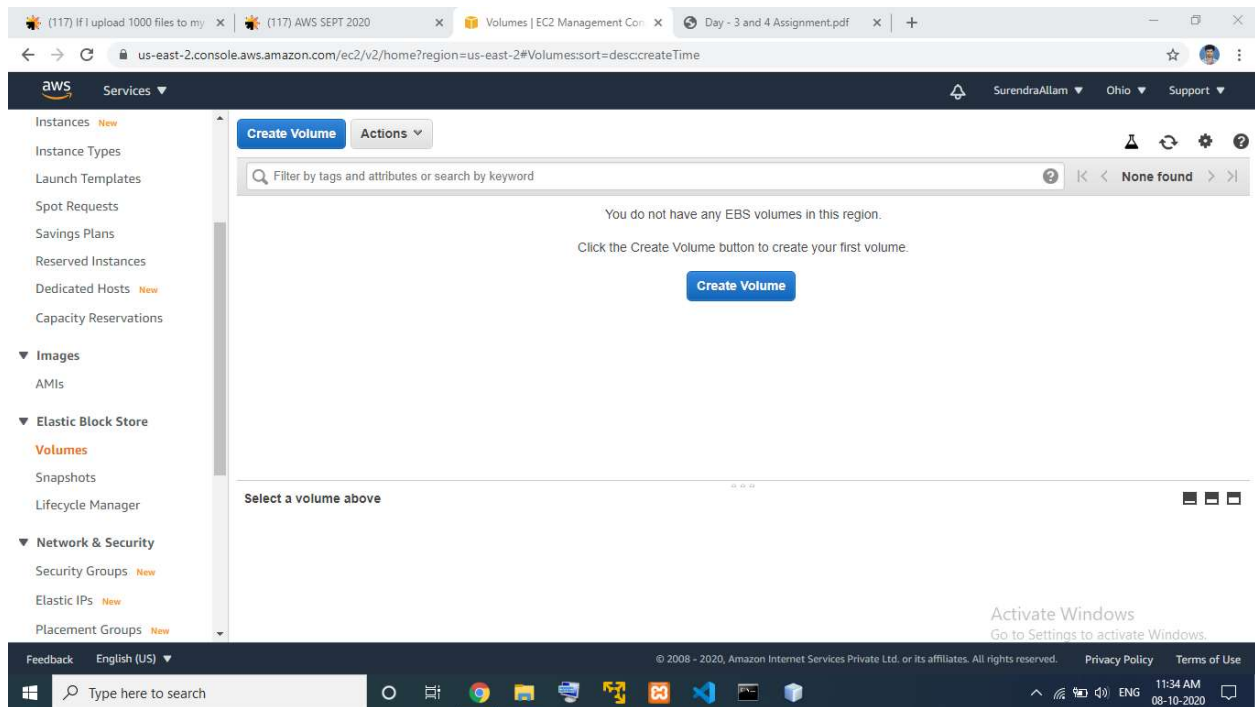
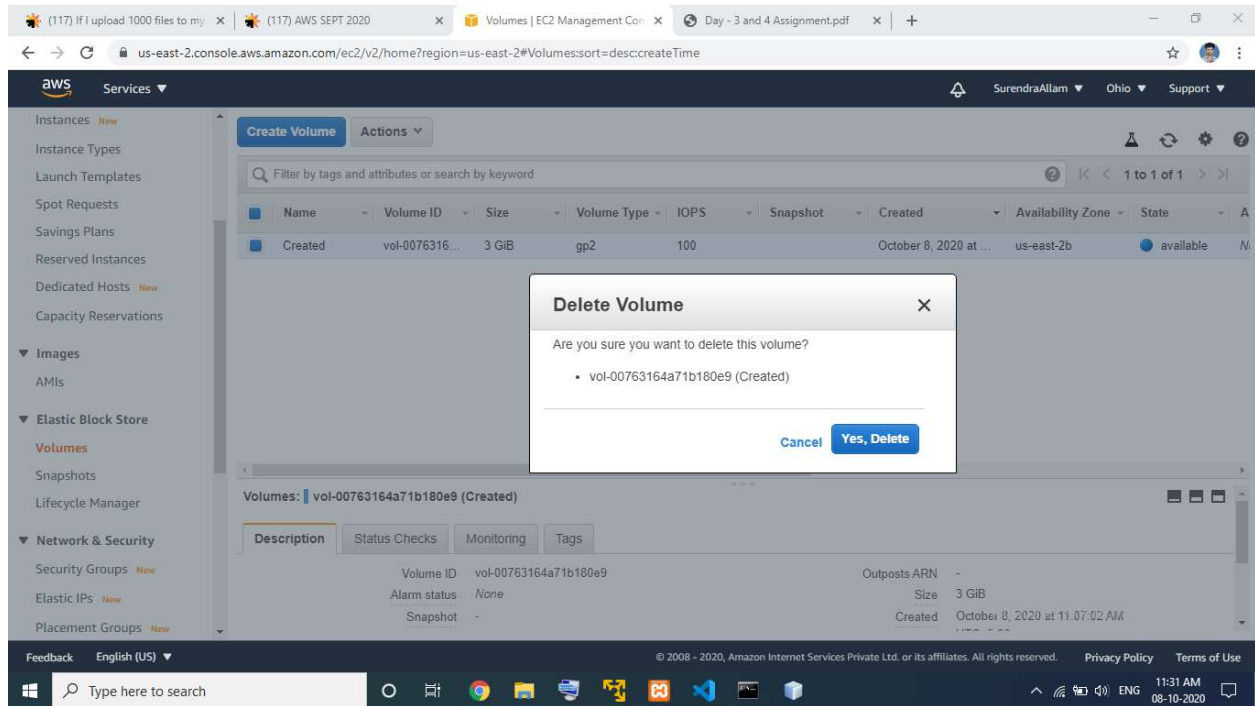


7:Try modifying the volume config

Modifying the volume 2GB to 3GB



8:Delete the volume



PROJECT 4:

Working with Elastic IP's

Task1:Creating a Linux instance

Instance name 'Apache'

The screenshot shows the AWS Management Console interface. The top navigation bar includes the AWS logo, 'Services', and user information. The left sidebar contains navigation links for 'New EC2 Experience', 'EC2 Dashboard', 'Events', 'Tags', 'Limits', 'Instances', 'Instance Types', 'Launch Templates', 'Spot Requests', 'Savings Plans', 'Reserved Instances', 'Dedicated Hosts', 'Capacity Reservations', 'Images', 'AMIs', and 'Elastic Block Store'. The main content area displays the 'Instances (1/2)' page with a table of instances:

	Name	Instance ID	Instance state	Instance type	Status check	Alarm Status	Availability zone
<input checked="" type="checkbox"/>	Apache	i-057664ab2b1743fd8	Running	t2.micro	2/2 checks ...	No alarms	us-east-2a
<input type="checkbox"/>	EBS-windows	i-05241a0c919ed33e4	Terminated	t2.micro	-	No alarms	us-east-2b

Below the table, the 'Instance: i-057664ab2b1743fd8' details are shown, including tabs for 'Details', 'Security', 'Networking', 'Storage', 'Status Checks', 'Monitoring', and 'Tags'. An 'Activate Windows' watermark is visible in the bottom right corner.

The screenshot shows the detailed view of the 'Apache' instance (i-057664ab2b1743fd8) in the AWS Management Console. The breadcrumb navigation shows 'EC2 > Instances > i-057664ab2b1743fd8'. The main content area displays the 'Instance summary' for the 'Apache' instance, which is in a 'Running' state. The summary includes the following information:

- Instance ID:** i-057664ab2b1743fd8 (Apache)
- Instance state:** Running
- Instance type:** t2.micro
- IAM Role:** -
- Public IPv4 address:** 18.224.57.240 | [open address](#)
- Public IPv4 DNS:** ec2-18-224-57-240.us-east-2.compute.amazonaws.com | [open address](#)
- Elastic IP addresses:** It is taking a bit longer than usual to fetch your data
- Subnet ID:** subnet-216da64a | [open address](#)
- Private IPv4 addresses:** 172.31.15.96
- Private IPv4 DNS:** ip-172-31-15-96.us-east-2.compute.internal
- VPC ID:** vpc-e740e38c | [open address](#)

Below the summary, there is a section for 'AWS Compute Optimizer' with a loading message. An 'Activate Windows' watermark is visible in the bottom right corner.

Task2: Launching a LINUX Instance and Install Apache server And active that server

Install an Apache Server

Cmd:

```
# sudo -s
```

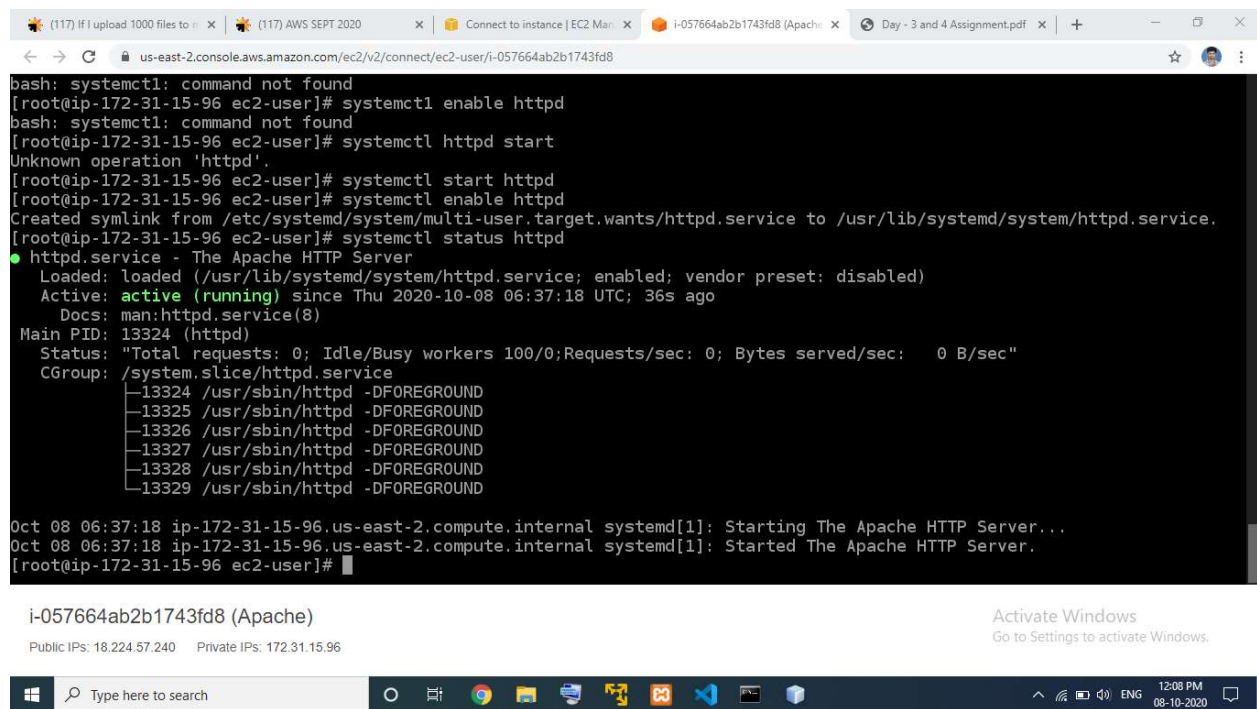
```
# yum -y update
```

```
# yum install httpd
```

```
# systemctl start httpd
```

```
# systemctl enable httpd
```

```
# systemctl status httpd
```



```
bash: systemctl: command not found
[root@ip-172-31-15-96 ec2-user]# systemctl enable httpd
bash: systemctl: command not found
[root@ip-172-31-15-96 ec2-user]# systemctl httpd start
Unknown operation 'httpd'.
[root@ip-172-31-15-96 ec2-user]# systemctl start httpd
[root@ip-172-31-15-96 ec2-user]# systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-15-96 ec2-user]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; vendor preset: disabled)
   Active: active (running) since Thu 2020-10-08 06:37:18 UTC; 36s ago
     Docs: man:httpd.service(8)
  Main PID: 13324 (httpd)
    Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec: 0 B/sec"
    CGroup: /system.slice/httpd.service
            └─13324 /usr/sbin/httpd -DFOREGROUND
              └─13325 /usr/sbin/httpd -DFOREGROUND
                └─13326 /usr/sbin/httpd -DFOREGROUND
                  └─13327 /usr/sbin/httpd -DFOREGROUND
                    └─13328 /usr/sbin/httpd -DFOREGROUND
                      └─13329 /usr/sbin/httpd -DFOREGROUND

Oct 08 06:37:18 ip-172-31-15-96.us-east-2.compute.internal systemd[1]: Starting The Apache HTTP Server...
Oct 08 06:37:18 ip-172-31-15-96.us-east-2.compute.internal systemd[1]: Started The Apache HTTP Server.
[root@ip-172-31-15-96 ec2-user]#
```

i-057664ab2b1743fd8 (Apache)

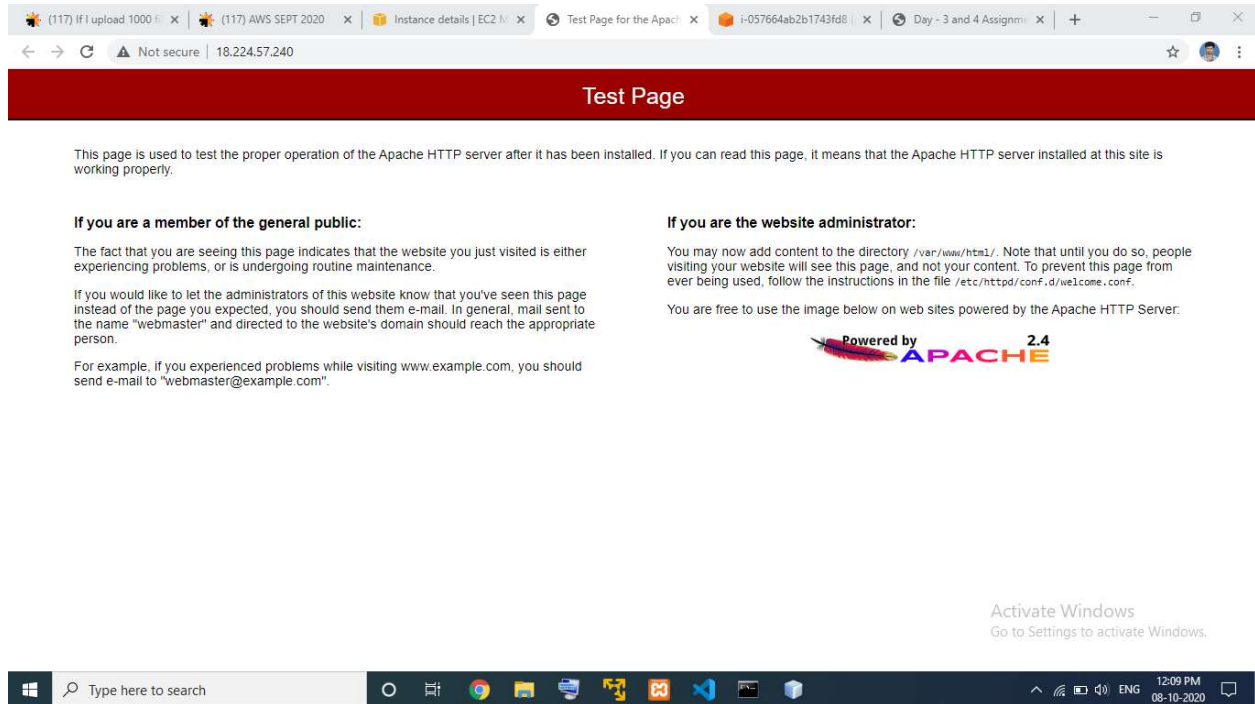
Public IPs: 18.224.57.240 Private IPs: 172.31.15.96

Activate Windows
Go to Settings to activate Windows.

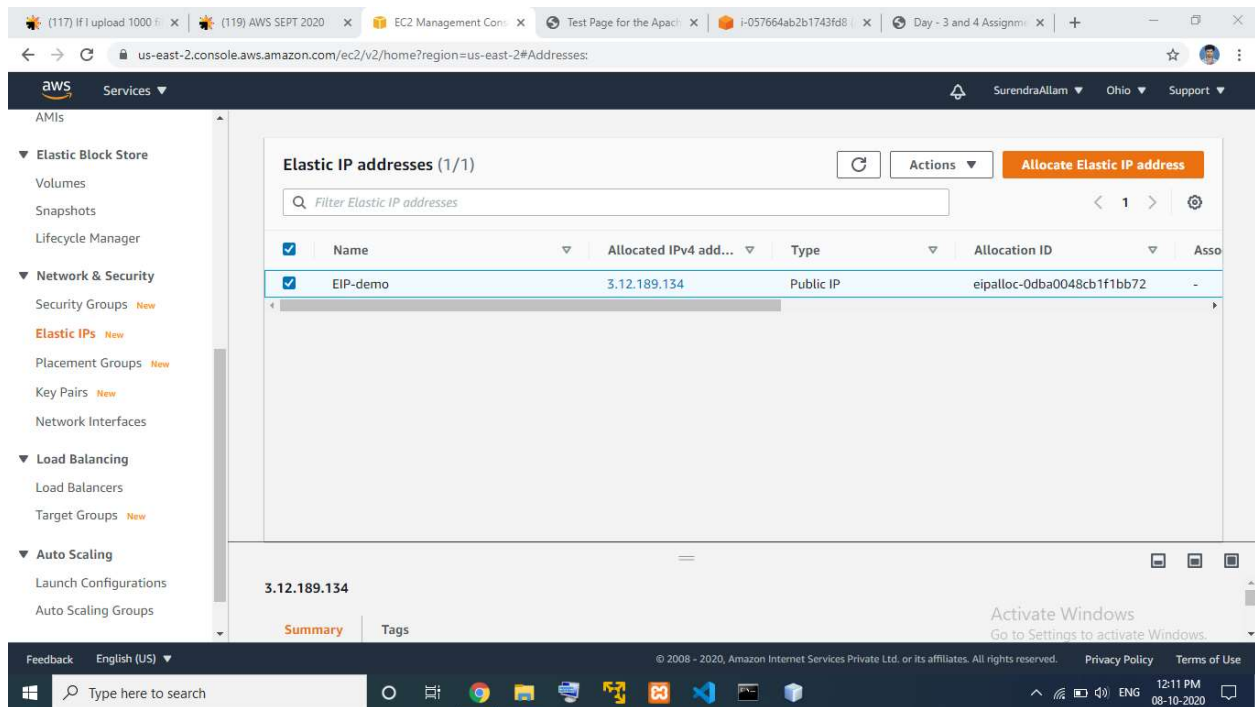
Type here to search

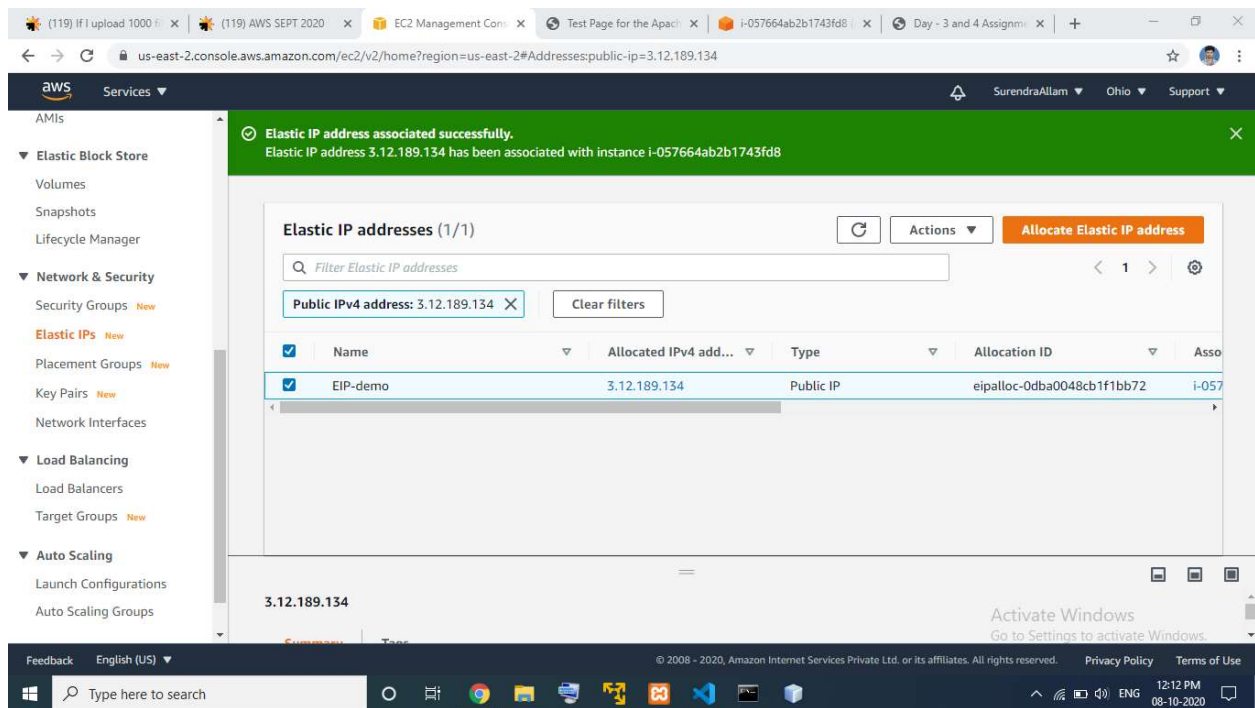
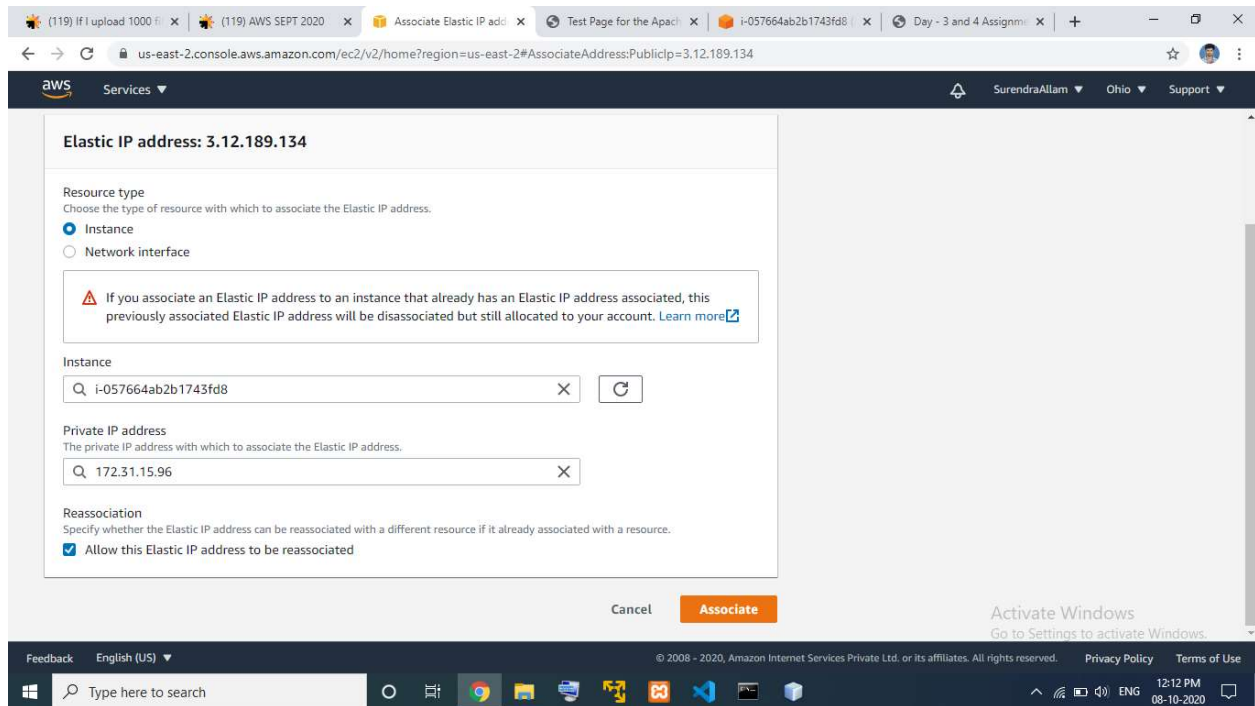
12:08 PM
08-10-2020

Task 3: Verify successful installation of Apache



Task 4: Create Elastic IP and associate ELP with linux instance





Now the Public Ip of linux instance Changed with Elastic Ip address.

Instance summary for i-057664ab2b1743fd8 (Apache) Info

Updated less than a minute ago

Instance ID i-057664ab2b1743fd8 (Apache)	Public IPv4 address 3.12.189.134 open address	Private IPv4 addresses 172.31.15.96
Instance state Running	Public IPv4 DNS ec2-3-12-189-134.us-east-2.compute.amazonaws.com open address	Private IPv4 DNS ip-172-31-15-96.us-east-2.compute.internal
Instance type t2.micro	Elastic IP addresses It is taking a bit longer than usual to fetch your data	VPC ID vpc-e740e38c
IAM Role -	Subnet ID subnet-216da64a	

AWS Compute Optimizer
Opt-in to AWS Compute Optimizer for recommendations. [Learn more](#)

Activate Windows
Go to Settings to activate Windows

Task5: verify Old public ip address is working or not

This site can't be reached

18.224.57.240 took too long to respond.

Try:

- Checking the connection
- [Checking the proxy and the firewall](#)
- [Running Windows Network Diagnostics](#)

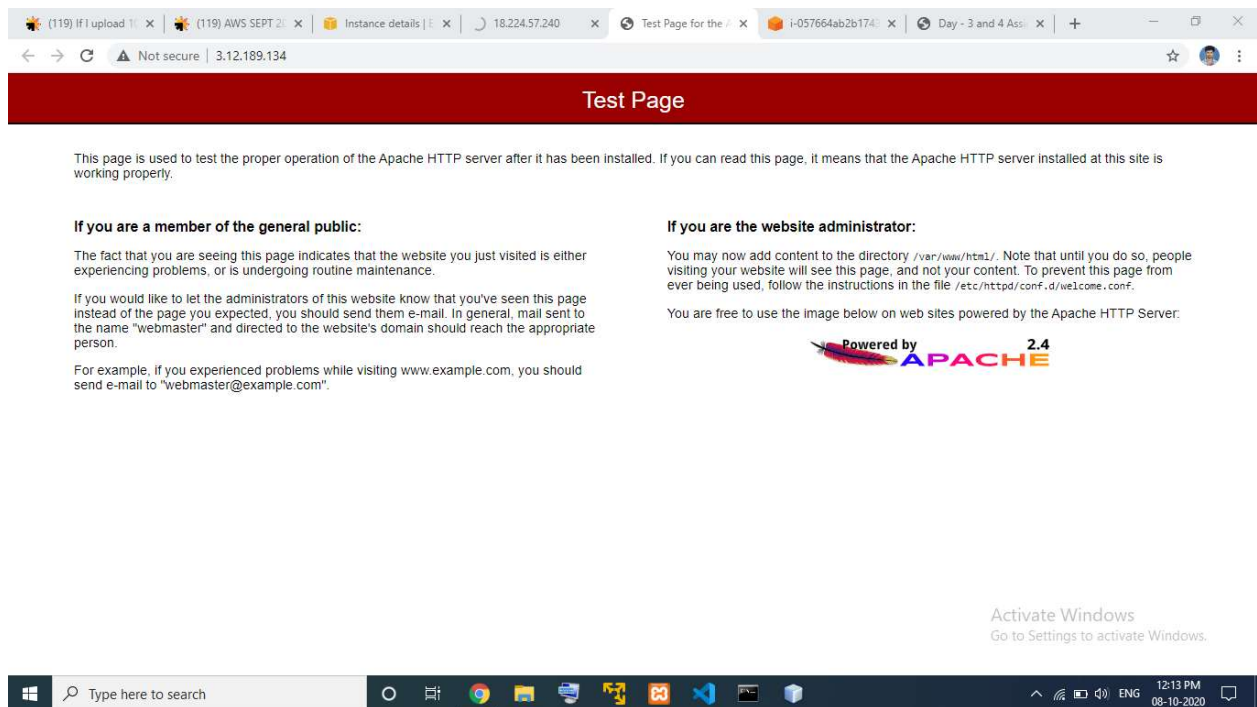
ERR_CONNECTION_TIMED_OUT

[Reload](#) [Details](#)

Activate Windows
Go to Settings to activate Windows.

NOTE: It is not working because EIP is assigned with these linux instance

Task6:Verify Apache server is running with EIP

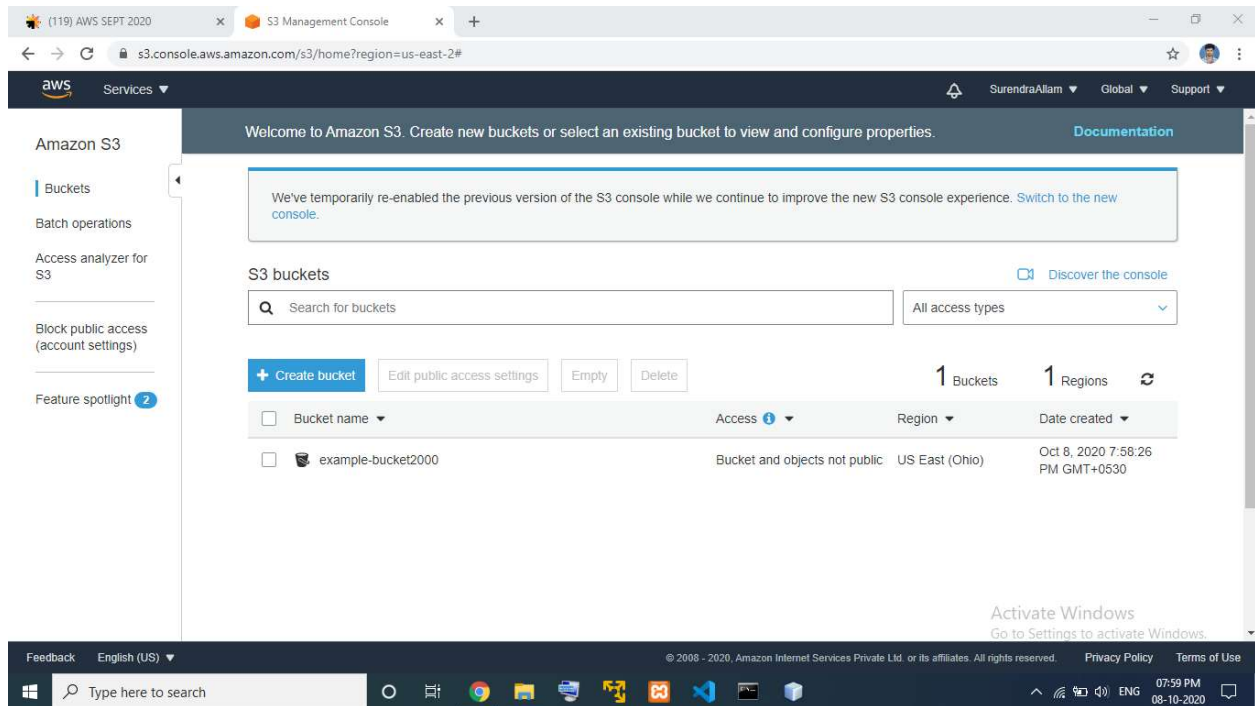


PROJECT 5:

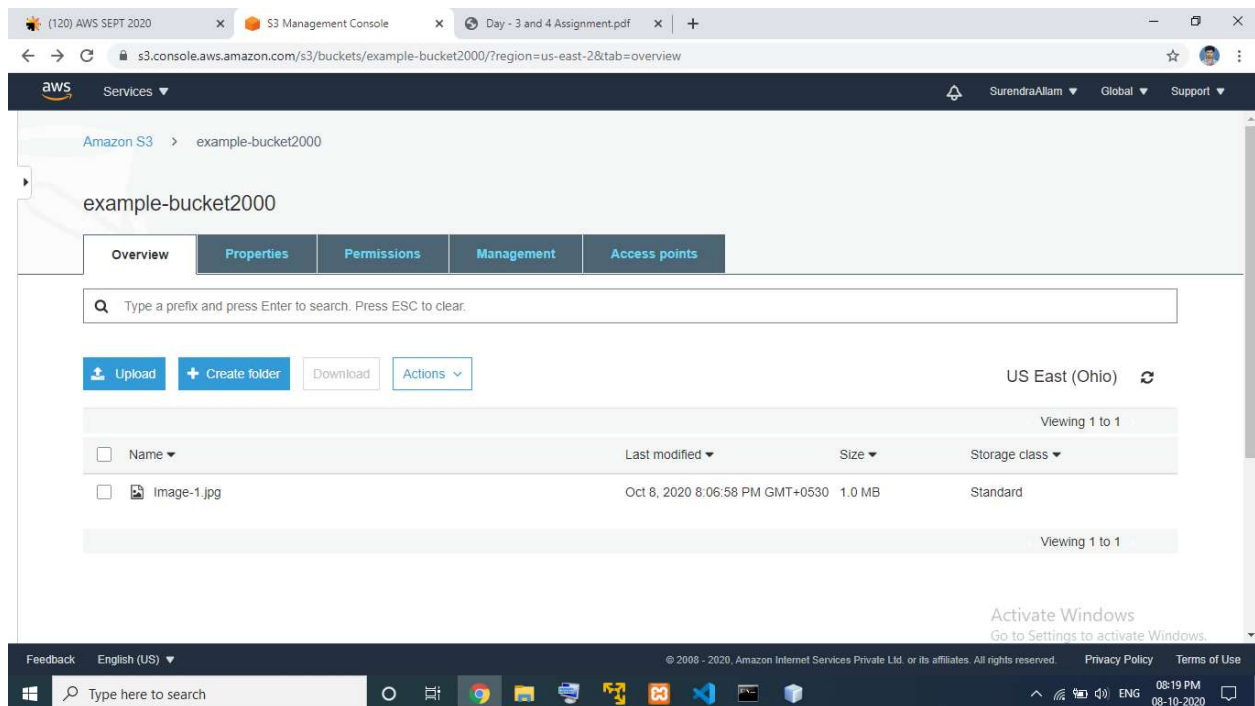
Working with S3

a.working with S3-.jpg

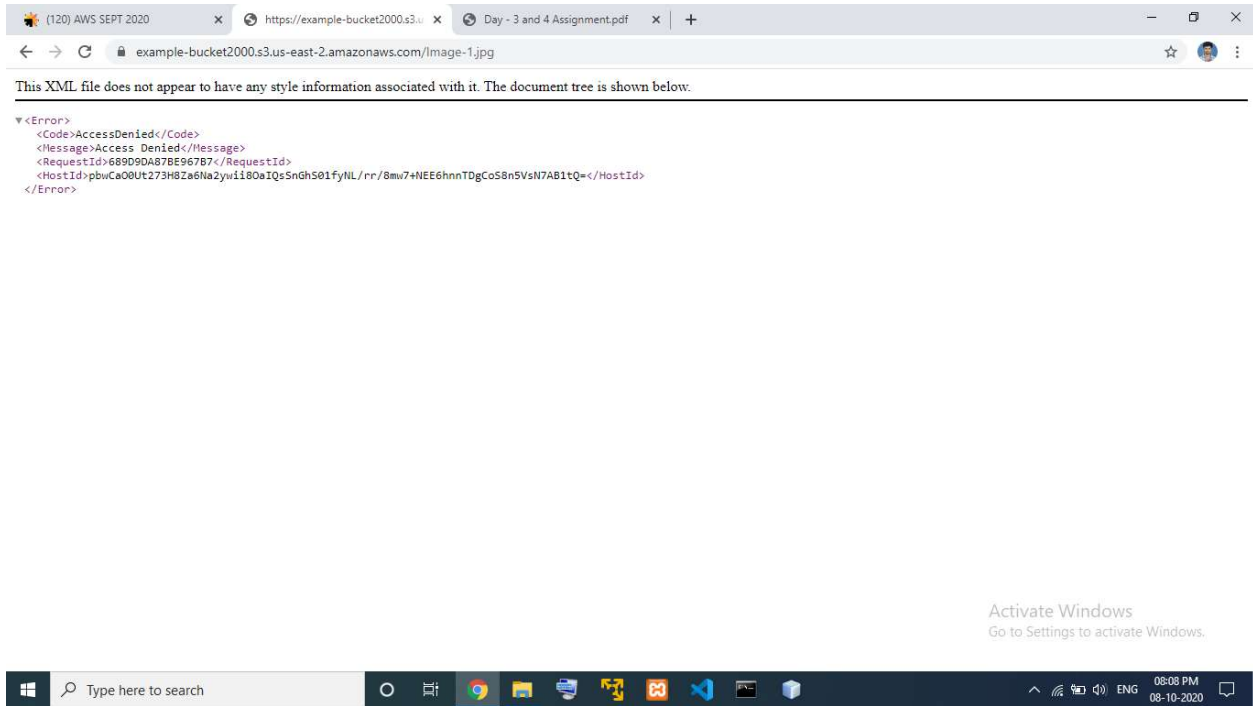
Task1: Create BUCKET inside the S3



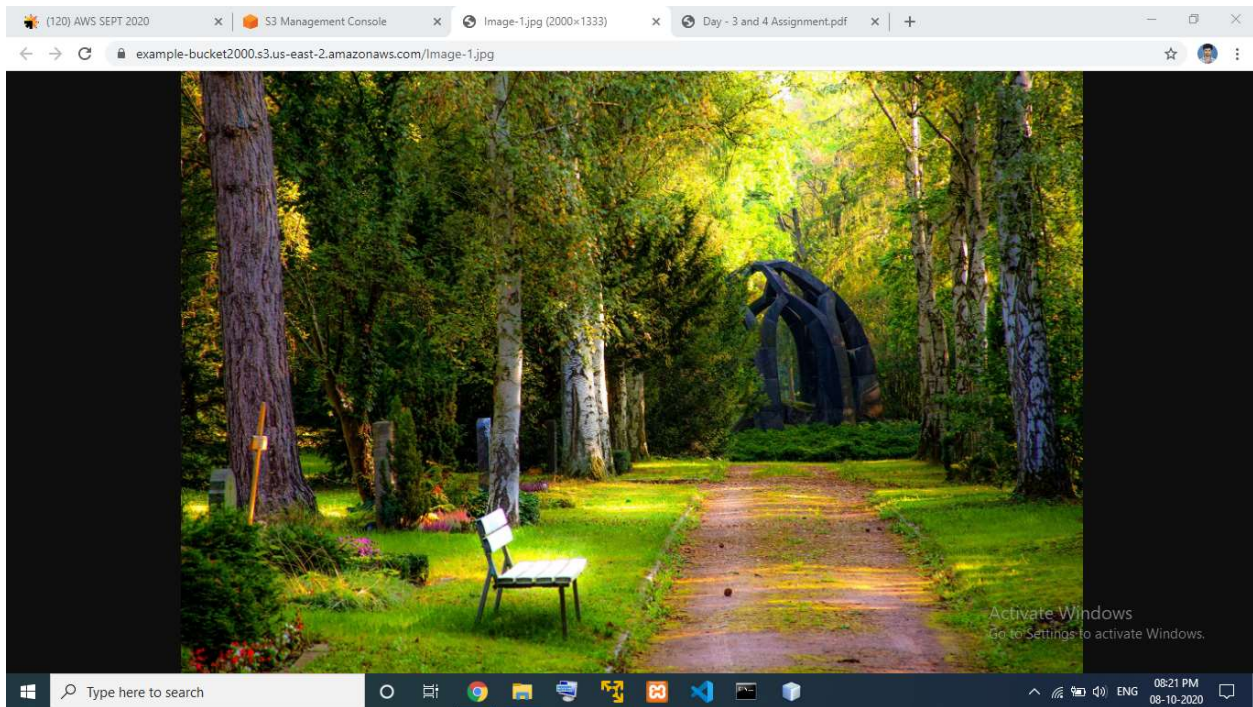
Task2: Upload Image inside the bucket



Task3: Image before making public



Task4: Image after making Public



b.static web hosting

The screenshot shows the AWS S3 Management Console for a bucket named "example-bucket2000" in the US East (Ohio) region. The "Overview" tab is selected, displaying a list of objects in the bucket. The objects are:

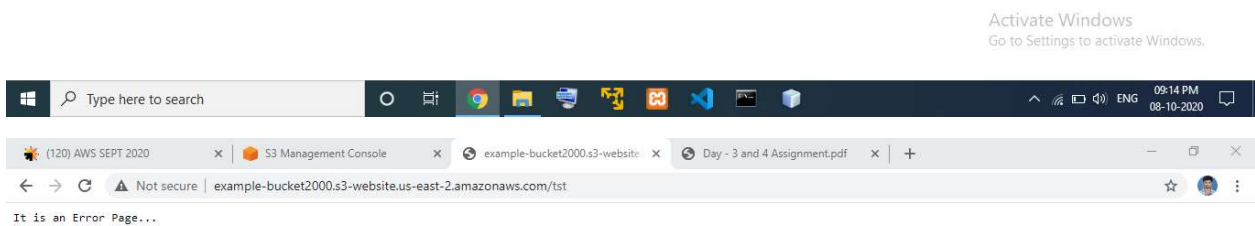
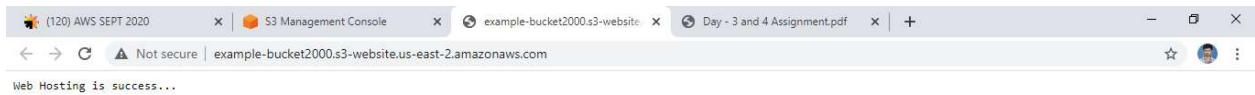
Name	Last modified	Size	Storage class
Image-1.jpg	Oct 8, 2020 8:06:58 PM GMT+0530	1.0 MB	Standard
error.txt	Oct 8, 2020 9:11:12 PM GMT+0530	22.0 B	Standard
index.txt	Oct 8, 2020 9:12:07 PM GMT+0530	25.0 B	Standard

The console also shows a search bar, buttons for "Upload", "Create folder", "Download", and "Actions", and a status bar at the bottom indicating 0 In progress, 6 Success, and 0 Error operations.

The screenshot shows the "Static website hosting" configuration page for the bucket "example-bucket2000". The configuration is as follows:

- Endpoint: <http://example-bucket2000.s3-website.us-east-2.amazonaws.com>
- Use this bucket to host a website: ☒ (Learn more)
- Index document:
- Error document:
- Redirection rules (optional):
- Redirect requests: ☐ (Learn more)

On the right, the "Object-level logging" section shows a toggle switch set to "Disabled".



c.Versioning

Browser tabs: (120) AWS SEPT 2020, S3 Management Console, Day - 3 and 4 Assignment.pdf

URL: s3.console.aws.amazon.com/s3/buckets/example-files-bucket2000/?region=us-east-2&tab=overview

Header: AWS Services, SurendraAllam, Global, Support

Page Title: Amazon S3 > example-files-bucket2000

example-files-bucket2000

Overview | Properties | Permissions | Management | Access points

Search: Type a prefix and press Enter to search. Press ESC to clear.

Buttons: Upload, Create folder, Download, Actions, Versions, Hide, Show

Region: US East (Ohio)

Name	Last modified	Size	Storage class
versionDemo.txt	Oct 8, 2020 9:28:59 PM GMT+0530	10.0 B	Standard

Operations: 0 In progress, 1 Success, 0 Error

Footer: Feedback, English (US), © 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy, Terms of Use

Browser tabs: (120) AWS SEPT 2020, S3 Management Console, Day - 3 and 4 Assignment.pdf

URL: s3.console.aws.amazon.com/s3/buckets/example-files-bucket2000/?region=us-east-2&tab=properties

Header: AWS Services, SurendraAllam, Global, Support

Page Title: Amazon S3 > example-files-bucket2000

example-files-bucket2000

Overview | Properties | Permissions | Management | Access points

Versioning

☒ Enable versioning

☐ Suspend versioning
This suspends the creation of object versions for all operations but preserves any existing object versions.

Enabled

Cancel Save

Server access logging

Set up access log records that provide details about access requests.

[Learn more](#)

Disabled

Operations: 0 In progress, 2 Success, 0 Error

Footer: Feedback, English (US), © 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy, Terms of Use

(120) AWS SEPT 2020 x S3 Management Console x Day - 3 and 4 Assignment.pdf x +

s3.console.aws.amazon.com/s3/buckets/example-files-bucket2000/?region=us-east-2&tab=overview&showversions=true

aws Services

SurendraAllam Global Support

example-files-bucket2000

Overview Properties Permissions Management Access points

Type a prefix and press Enter to search. Press ESC to clear.

Upload Create folder Download Actions Versions Hide Show US East (Ohio)

Viewing 1 to 2

<input type="checkbox"/>	Name	Version ID	Last modified	Size	Storage class
<input type="checkbox"/>	versionDemo.txt		Oct 8, 2020 9:30:43 PM		
<input type="checkbox"/>	Oct 8, 2020 9:30:43 PM (Latest version)	hTjfqNljiN.TcOcYqkJ_LIRHoRtrbH.		10.0 B	Standard
<input type="checkbox"/>	Oct 8, 2020 9:28:59 PM	gKE97BDPR4EBIFS1UMSxYb...		10.0 B	Standard

Viewing 1 to 2

Operations 0 In progress 2 Success 0 Error

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Type here to search

Activate Windows Go to Settings to activate Windows.

(120) AWS SEPT 2020 x S3 Management Console x Day - 3 and 4 Assignment.pdf x +

s3.console.aws.amazon.com/s3/buckets/example-files-bucket2000/?region=us-east-2&tab=overview&showversions=false

aws Services

SurendraAllam Global Support

example-files-bucket2000

Overview Properties Permissions Management Access points

Upload Create folder Download Actions Versions Hide Show US East (Ohio)

This bucket is empty. Upload new objects to get started.

Operations 0 In progress 4 Success 0 Error

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Type here to search

Activate Windows Go to Settings to activate Windows.

(120) AWS SEPT 2020 x S3 Management Console x Day - 3 and 4 Assignment.pdf x +

s3.console.aws.amazon.com/s3/buckets/example-files-bucket2000/?region=us-east-2&tab=overview&showversions=true

aws Services

SurendraAllam Global Support

example-files-bucket2000

Overview Properties Permissions Management Access points

Q Type a prefix and press Enter to search. Press ESC to clear.

Upload Create folder Download Actions Versions Hide Show US East (Ohio)

Viewing 1 to 3

<input type="checkbox"/>	Name	Version ID	Last modified	Size	Storage class
<input type="checkbox"/>	versionDemo.txt		Oct 8, 2020 9:33:33 PM		
<input type="checkbox"/>	Oct 8, 2020 9:33:33 PM (Delete marker)	kkZ3EE5Sv5ulnUPqxwrpJK2YFK...		--	--
<input type="checkbox"/>	Oct 8, 2020 9:30:43 PM	hTjfqNlIjN.TcOcYqkJ_LIRHoRtrhbH.		10.0 B	Standard
<input type="checkbox"/>	Oct 8, 2020 9:28:59 PM	gKE97BDPR4EBIFS1UMSxYb...		10.0 B	Standard

Operations 0 In progress 4 Success 0 Error

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Type here to search

Activate Windows Go to Settings to activate Windows.

(120) AWS SEPT 2020 x S3 Management Console x Day - 3 and 4 Assignment.pdf x +

s3.console.aws.amazon.com/s3/buckets/example-files-bucket2000/?region=us-east-2&tab=overview&showversions=true

aws Services

SurendraAllam Global Support

example-files-bucket2000

Overview Properties Permissions Management Access points

Q Type a prefix and press Enter to search. Press ESC to clear.

Upload Create folder Download Actions Versions Hide Show US East (Ohio)

Viewing 1 to 4

<input type="checkbox"/>	Name	Version ID	Last modified	Size	Storage class
<input type="checkbox"/>	versionDemo.txt		Oct 8, 2020 9:37:42 PM		
<input type="checkbox"/>	Oct 8, 2020 9:37:42 PM (Latest version)	ObGqNVDJmEMRpWB0GYirTO...		10.0 B	Standard
<input type="checkbox"/>	Oct 8, 2020 9:33:33 PM (Delete marker)	kkZ3EE5Sv5ulnUPqxwrpJK2YFK...		--	--
<input type="checkbox"/>	Oct 8, 2020 9:30:43 PM	hTjfqNlIjN.TcOcYqkJ_LIRHoRtrhbH.		10.0 B	Standard
<input type="checkbox"/>	Oct 8, 2020 9:28:59 PM	gKE97BDPR4EBIFS1UMSxYb...		10.0 B	Standard

Operations 0 In progress 5 Success 0 Error

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Type here to search

Activate Windows Go to Settings to activate Windows.

QUESTION 1:

Explain life cycle effects on instances: Stop, start, reboot, terminate- public IP, Private IP, Applications installed.

Answer:-

Reboot:- In this reboot Public IP, Private IP everything will be the same. It is just like restarting our system. And no loss for installed applications.

Stop/Start:- Here after stopping and again starting our instance Public IP will be gone. Assign a new Public IP to our instance and Private IP is the same. And no loss for installed applications.

Terminated:- After terminating our instance Public IP and Private IP and installed applications everything will be gone.