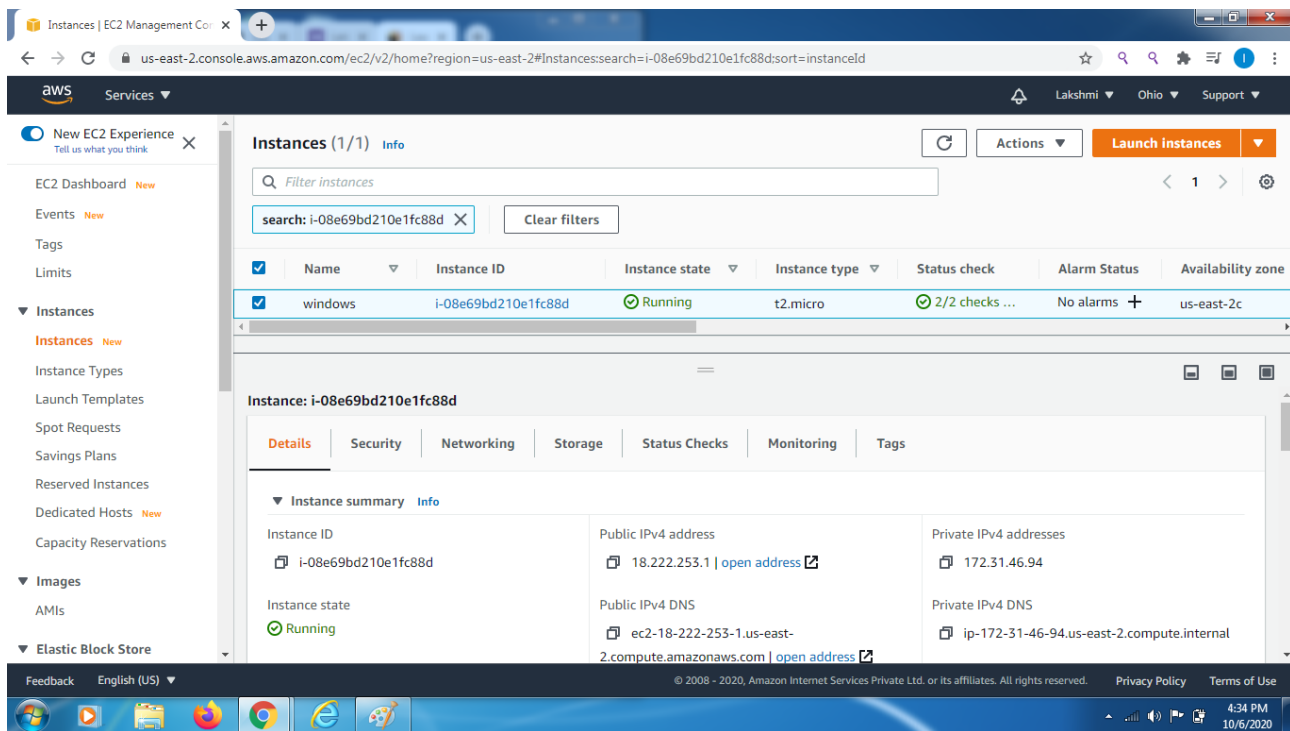


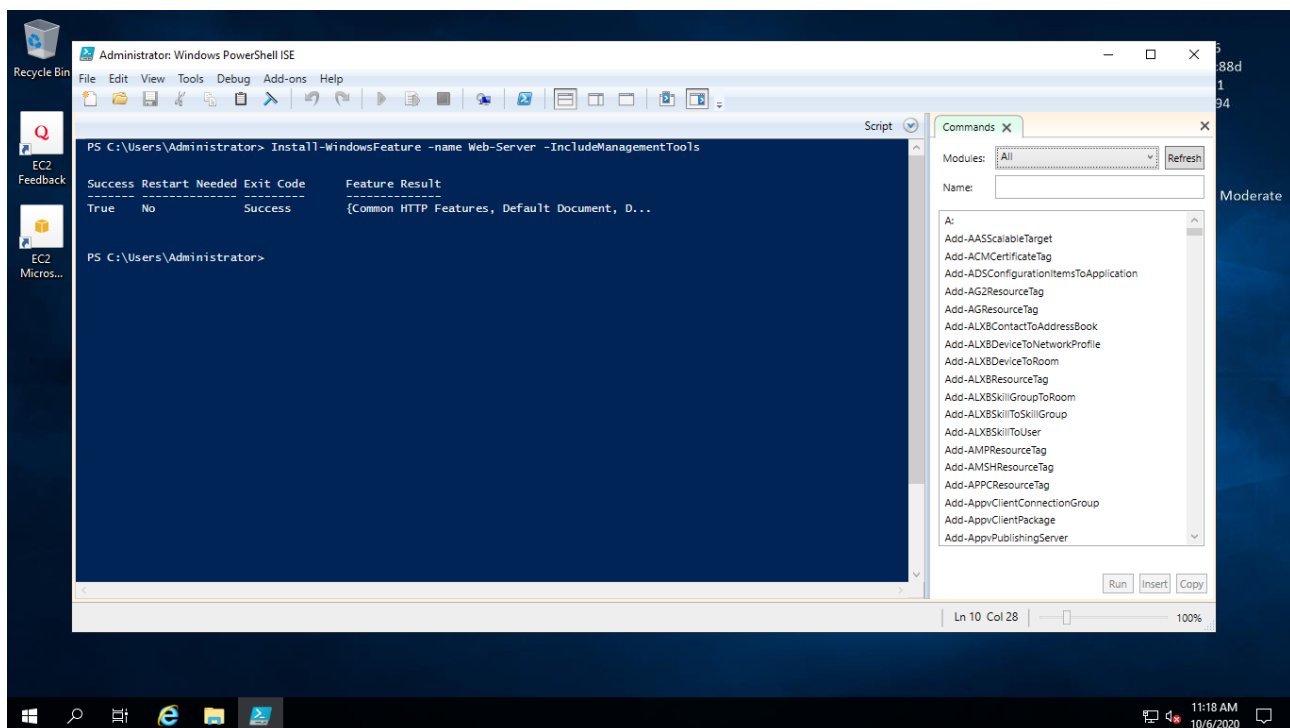
PROJECT 1:

Deploying a web server in Windows instance

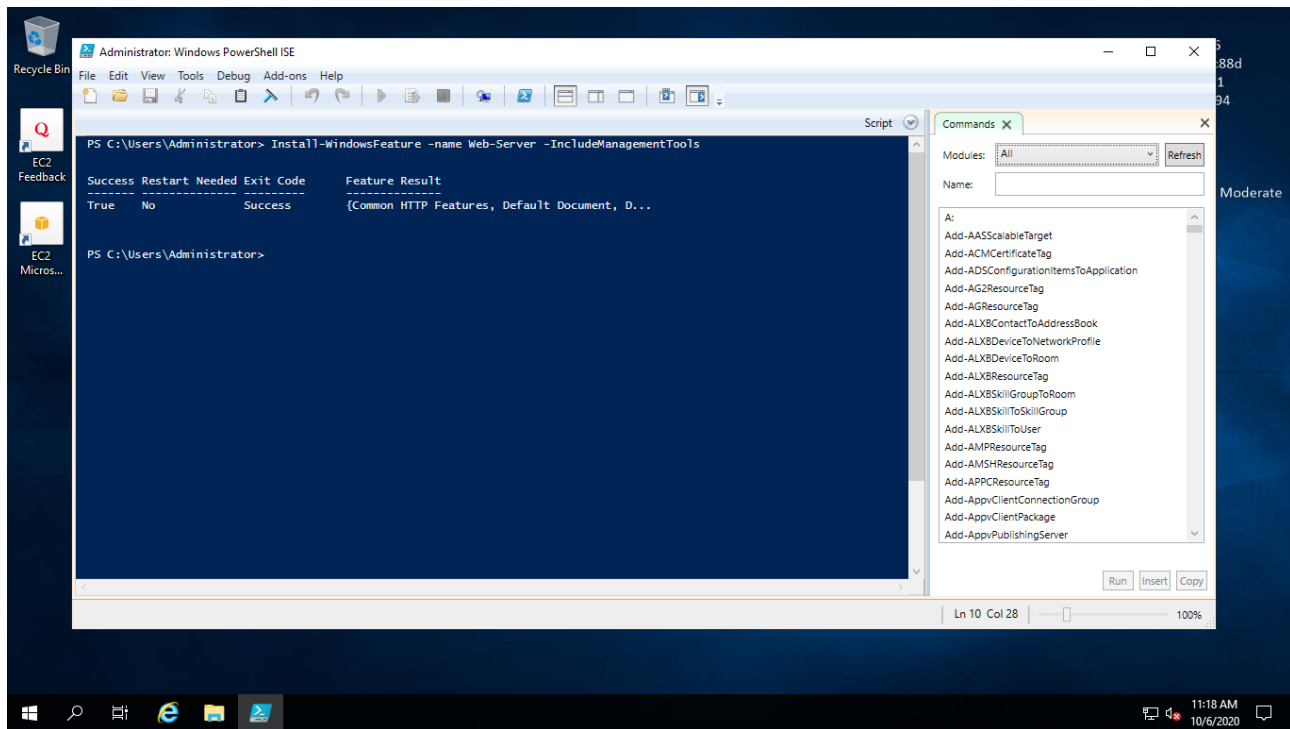
Task 1: Create a windows instance using AMI: Windows 2019 base



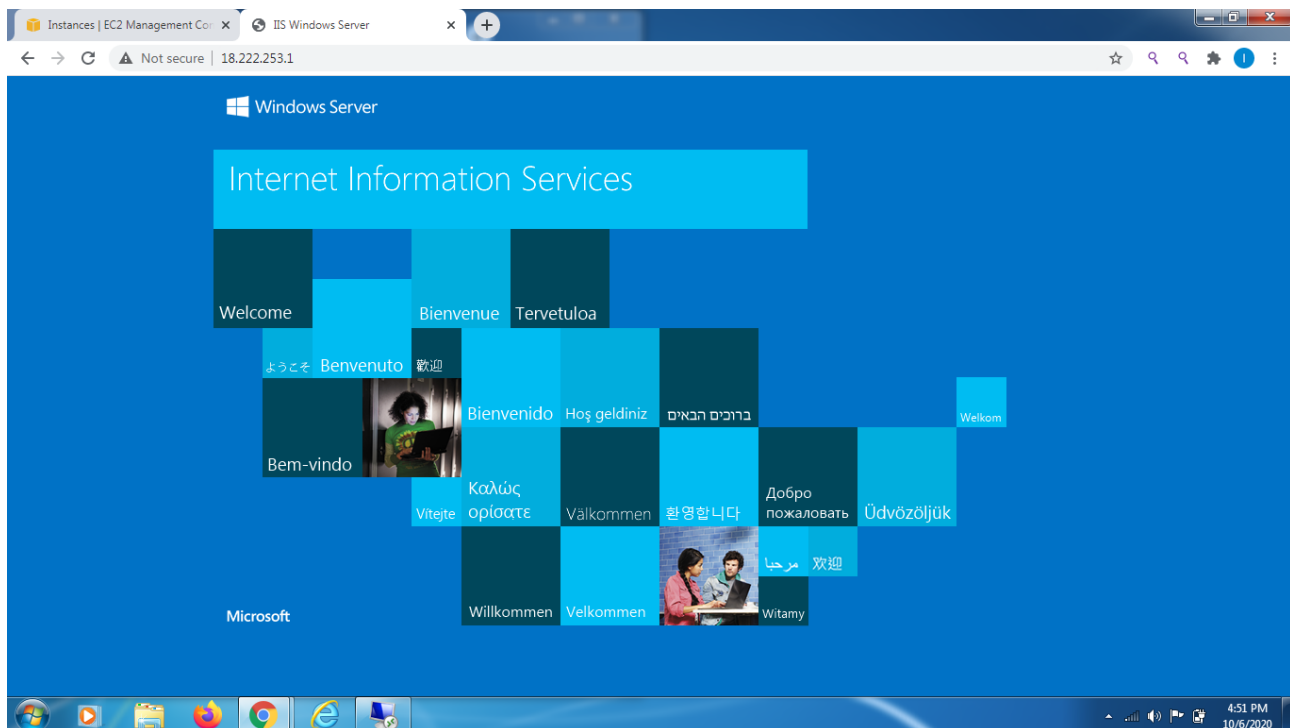
Task 2: Launch the Windows instance using RDP



Task 3: Install IIS web server using Powershell ISE



Task 4: Verify successful installation of IIS Web Server



Task 5: termination of windows instance

The screenshot displays the AWS Management Console interface for the 'us-east-2' region. The left-hand navigation pane includes sections for 'New EC2 Experience', 'Instances', 'Images', and 'Elastic Block Store'. The 'Instances' section is currently selected, showing a list of instances. A green notification banner at the top of the main content area reports four successful actions: 'Successfully stopped i-08e69bd210e1fc88d', 'Successfully started i-08e69bd210e1fc88d', 'Successfully rebooted i-08e69bd210e1fc88d', and 'Successfully terminated i-08e69bd210e1fc88d'. Below the notification, the 'Instances (1/1)' table lists one instance named 'windows' with ID 'i-08e69bd210e1fc88d', which is in the 'Terminated' state. The instance type is 't2.micro' and it is located in the 'us-east-2c' availability zone. Below the table, the 'Instance: i-08e69bd210e1fc88d (windows)' details are shown, with tabs for 'Details', 'Security', 'Networking', 'Storage', 'Status Checks', 'Monitoring', and 'Tags'. The 'Details' tab is active, displaying the 'Instance summary' with fields for 'Instance ID', 'Public IPv4 address', and 'Private IPv4 addresses'. The bottom of the console shows the footer with copyright information and a system clock indicating 5:01 PM on 10/6/2020.

Instances | EC2 Management Console | IIS Windows Server

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

Services

New EC2 Experience

EC2 Dashboard

Events

Tags

Limits

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

Images

AMIs

Elastic Block Store

Successfully stopped i-08e69bd210e1fc88d

Successfully started i-08e69bd210e1fc88d

Successfully rebooted i-08e69bd210e1fc88d

Successfully terminated i-08e69bd210e1fc88d

Instances (1/1)

Filter instances

Launch instances

Name	Instance ID	Instance state	Instance type	Status check	Alarm Status	Availability zone
windows	i-08e69bd210e1fc88d	Terminated	t2.micro	2/2 checks ...	No alarms	us-east-2c

Instance: i-08e69bd210e1fc88d (windows)

Details | Security | Networking | Storage | Status Checks | Monitoring | Tags

Instance summary

Instance ID

Public IPv4 address

Private IPv4 addresses

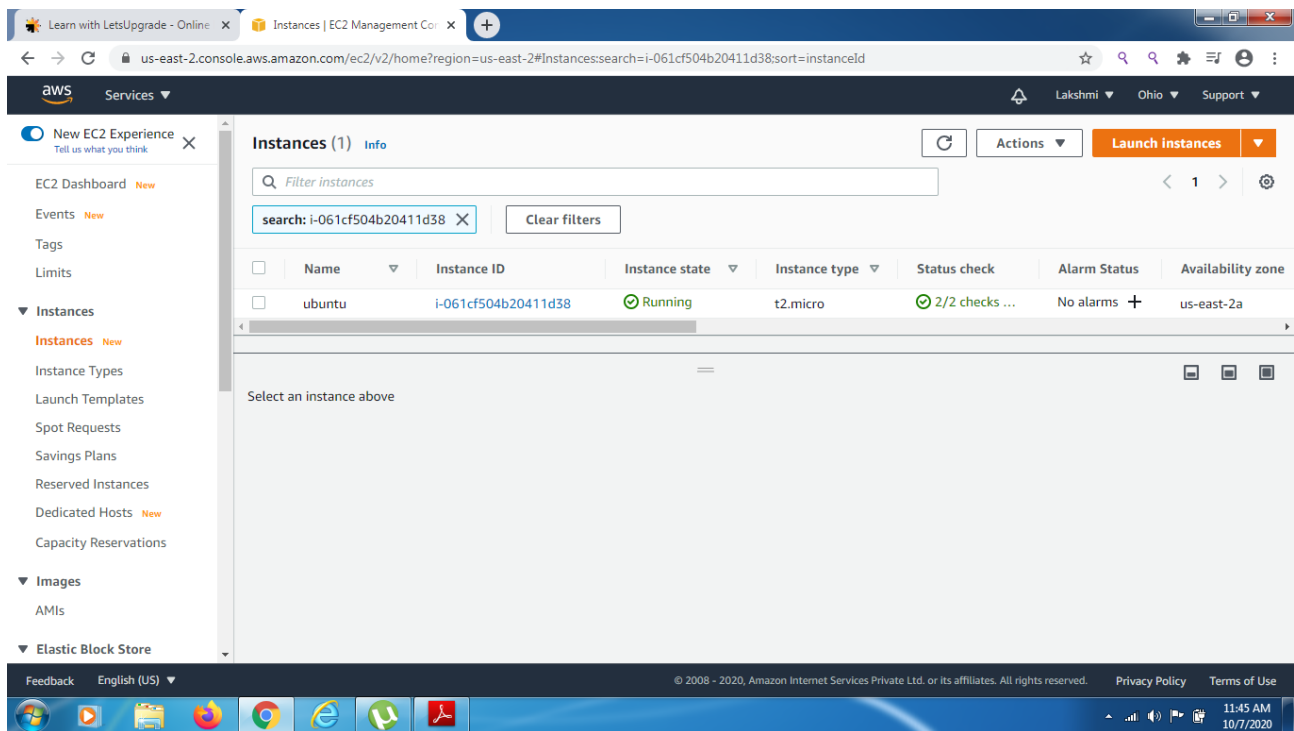
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy Terms of Use

5:01 PM 10/6/2020

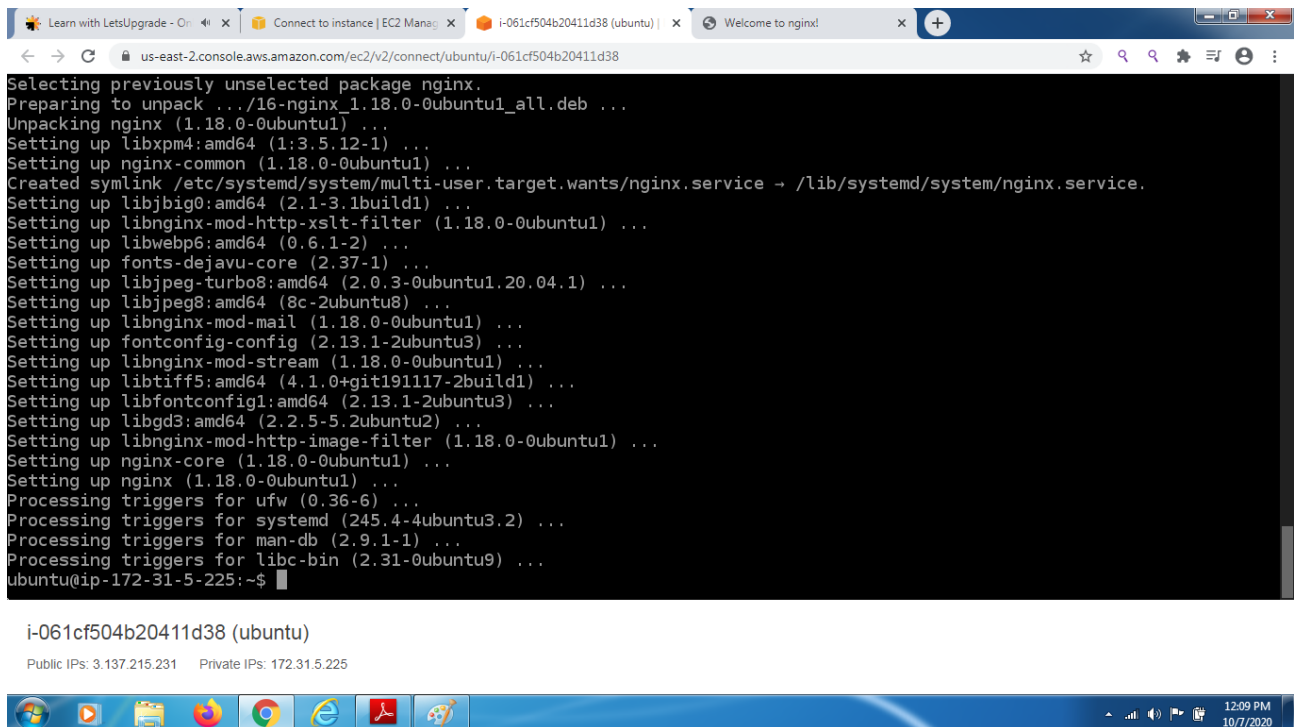
PROJECT 2:

Deploying a web server in ubuntu instance

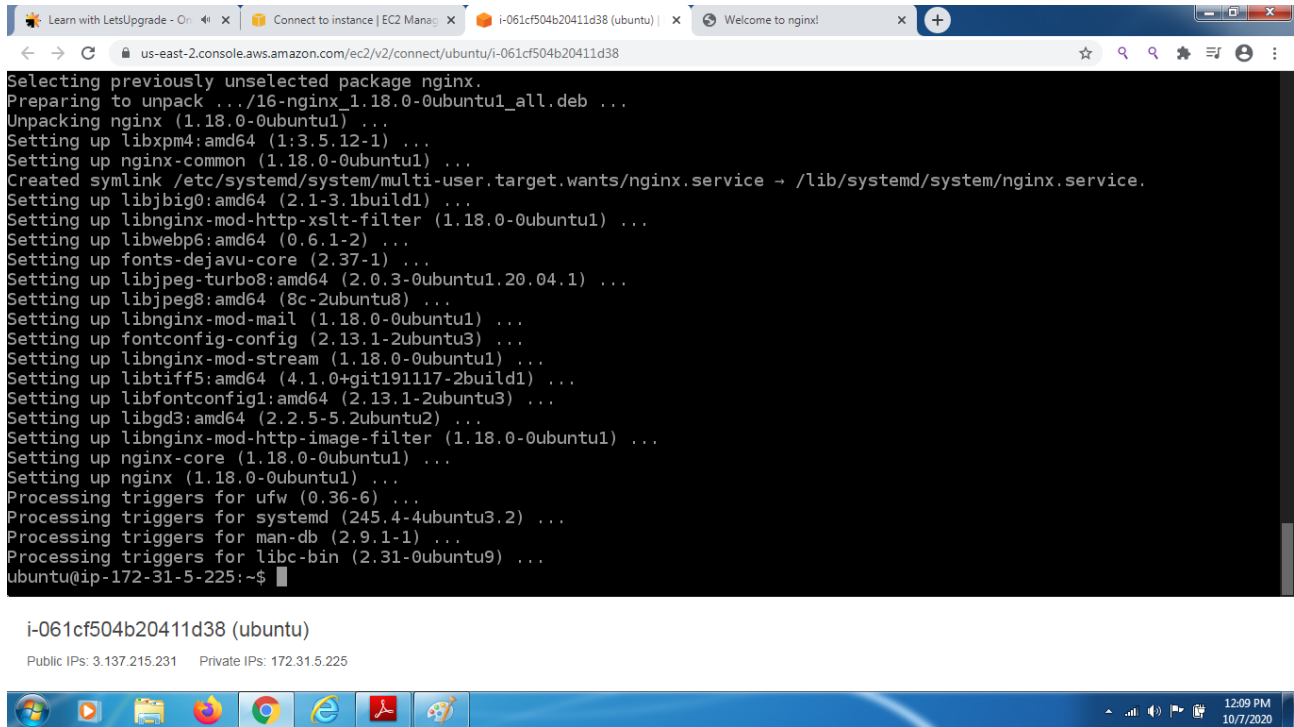
Task 1: Create a windows instance using AMI: Ubuntu Server 18.04 LTS (HVM)



Task 2: connect to the sever



Task 3:Installation of nginx



```
us-east-2.console.aws.amazon.com/ec2/v2/connect/ubuntu/i-061cf504b20411d38

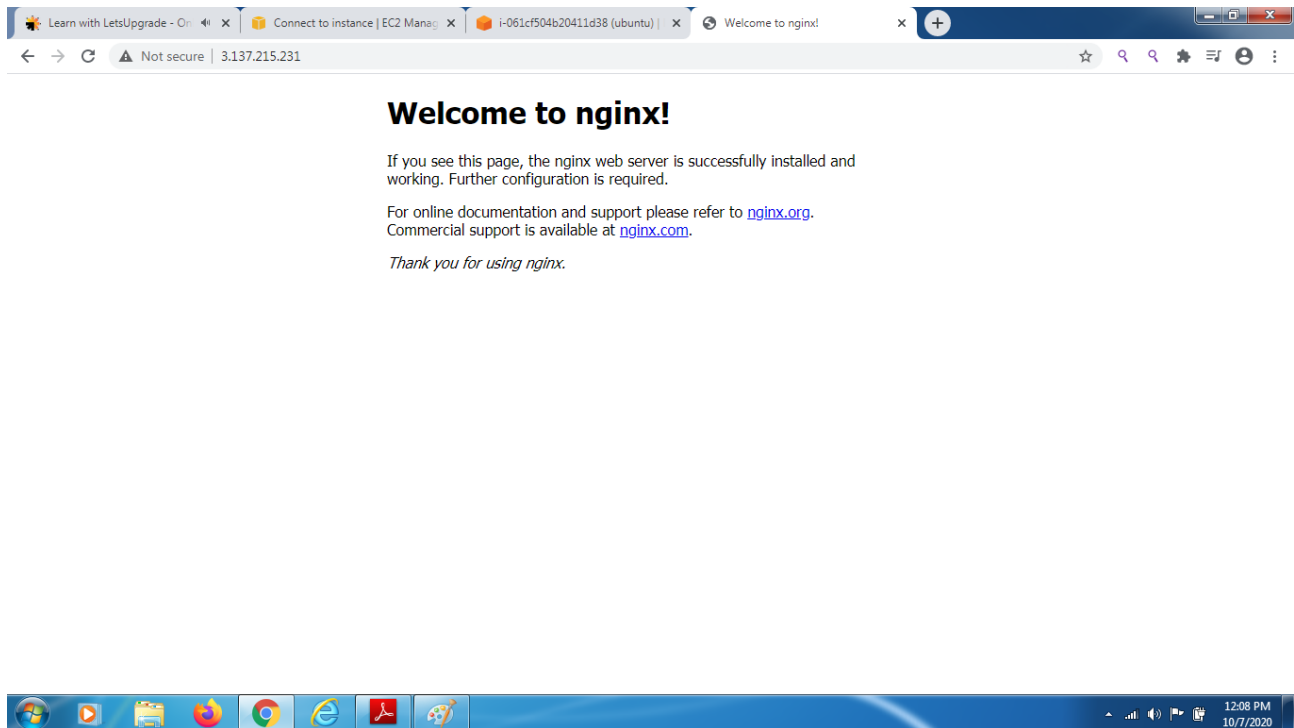
Selecting previously unselected package nginx.
Preparing to unpack .../16-nginx_1.18.0-0ubuntu1_all.deb ...
Unpacking nginx (1.18.0-0ubuntu1) ...
Setting up libxpm4:amd64 (1:3.5.12-1) ...
Setting up nginx-common (1.18.0-0ubuntu1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /lib/systemd/system/nginx.service.
Setting up libjpeg8:amd64 (8c-2ubuntu8) ...
Setting up libnginx-mod-http-xslt-filter (1.18.0-0ubuntu1) ...
Setting up libwebp6:amd64 (0.6.1-2) ...
Setting up fonts-dejavu-core (2.37-1) ...
Setting up libjpeg-turbo8:amd64 (2.0.3-0ubuntu1.20.04.1) ...
Setting up libnginx-mod-mail (1.18.0-0ubuntu1) ...
Setting up fontconfig-config (2.13.1-2ubuntu3) ...
Setting up libnginx-mod-stream (1.18.0-0ubuntu1) ...
Setting up libtiff5:amd64 (4.1.0+git191117-2build1) ...
Setting up libfontconfig1:amd64 (2.13.1-2ubuntu3) ...
Setting up libgd3:amd64 (2.2.5-5.2ubuntu2) ...
Setting up libnginx-mod-http-image-filter (1.18.0-0ubuntu1) ...
Setting up nginx-core (1.18.0-0ubuntu1) ...
Setting up nginx (1.18.0-0ubuntu1) ...
Processing triggers for ufw (0.36-6) ...
Processing triggers for systemd (245.4-4ubuntu3.2) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for libc-bin (2.31-0ubuntu9) ...
ubuntu@ip-172-31-5-225:~$
```

i-061cf504b20411d38 (ubuntu)

Public IPs: 3.137.215.231 Private IPs: 172.31.5.225

12:09 PM 10/7/2020

Task 4:Verify successful installation of nginx



Task 5: termination of ubuntu instance

The screenshot displays the AWS Management Console interface. At the top, a green banner indicates "Successfully terminated i-061cf504b20411d38". The left sidebar shows the navigation menu with categories like EC2 Dashboard, Events, Tags, Limits, Instances, Images, and Elastic Block Store. The main content area is titled "Instances (1/1)" and shows a table with one instance: "ubuntu" with ID "i-061cf504b20411d38", state "Terminated", type "t2.micro", and status check "2/2 checks ...". Below the table, the "Instance: i-061cf504b20411d38 (ubuntu)" details are shown, including tabs for Details, Security, Networking, Storage, Status Checks, Monitoring, and Tags. The "Instance summary" section displays the Instance ID, Instance state (Terminated), Public IPv4 address, Private IPv4 addresses, Public IPv4 DNS, and Private IPv4 DNS.

Learn with LetsUpgrade - Online x Instances | EC2 Management Console x

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

Services Lakshmi Ohio Support

New EC2 Experience Tell us what you think

EC2 Dashboard New

Events New

Tags

Limits

Instances

Instances New

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts New

Capacity Reservations

Images

AMIs

Elastic Block Store

Successfully terminated i-061cf504b20411d38

Instances (1/1) Info

Filter instances

1

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm Status	Availability zone
<input checked="" type="checkbox"/>	ubuntu	i-061cf504b20411d38	Terminated	t2.micro	2/2 checks ...	No alarms +	us-east-2a

Instance: i-061cf504b20411d38 (ubuntu)

Details Security Networking Storage Status Checks Monitoring Tags

Instance summary Info

Instance ID	Public IPv4 address	Private IPv4 addresses
i-061cf504b20411d38 (ubuntu)	-	-
Instance state	Public IPv4 DNS	Private IPv4 DNS
Terminated	-	-

Feedback English (US)

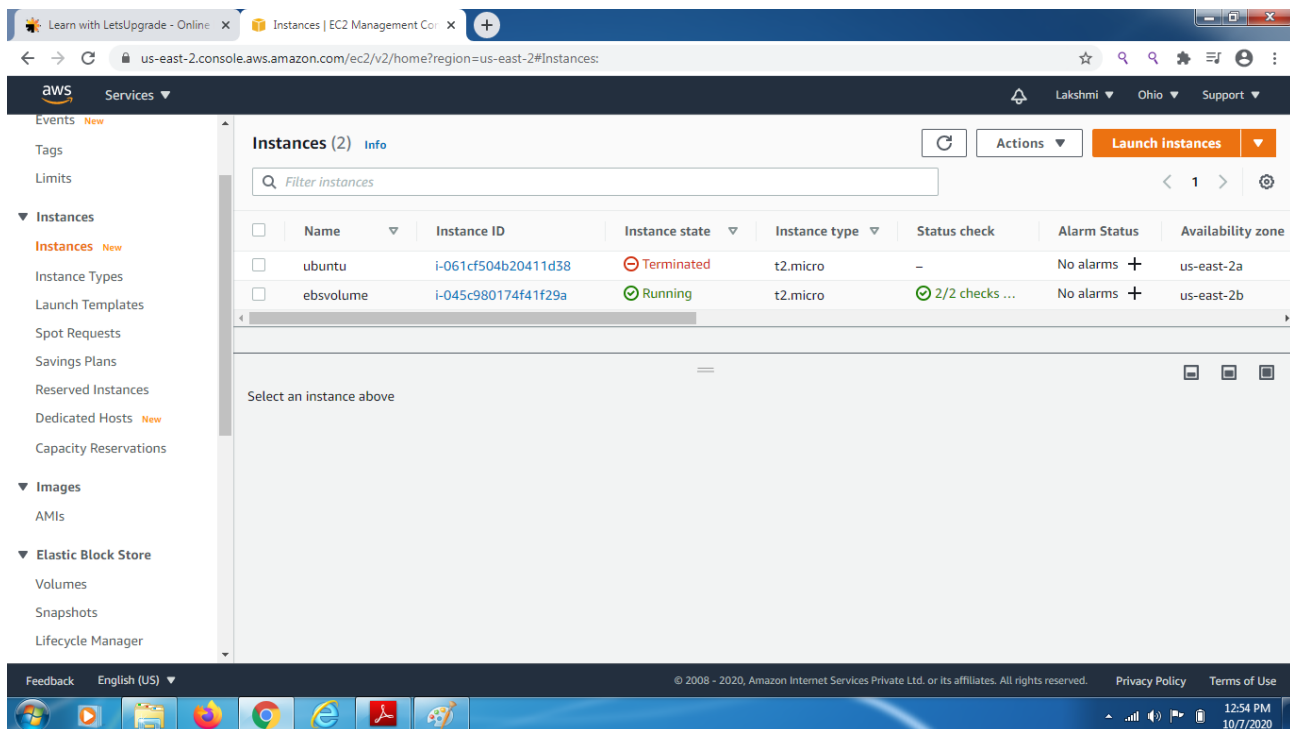
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy Terms of Use

12:13 PM 10/7/2020

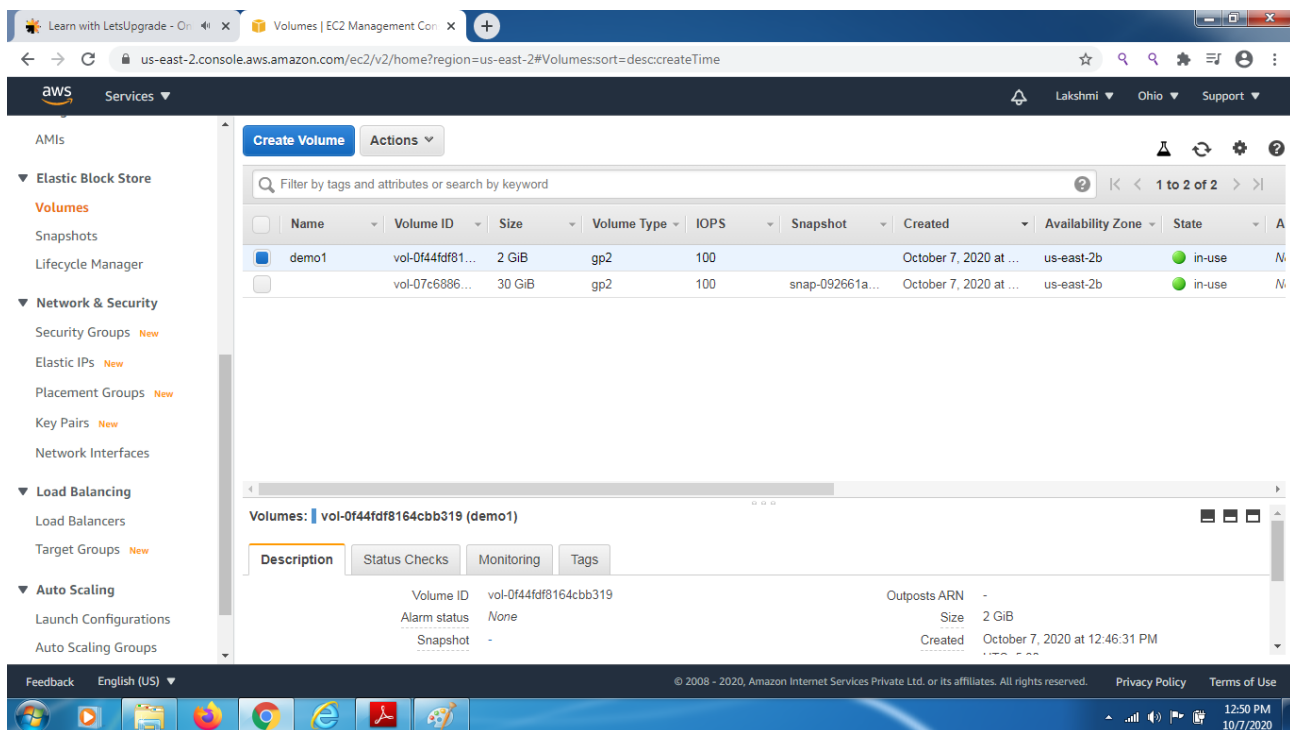
PROJECT 3:

Working with volumes

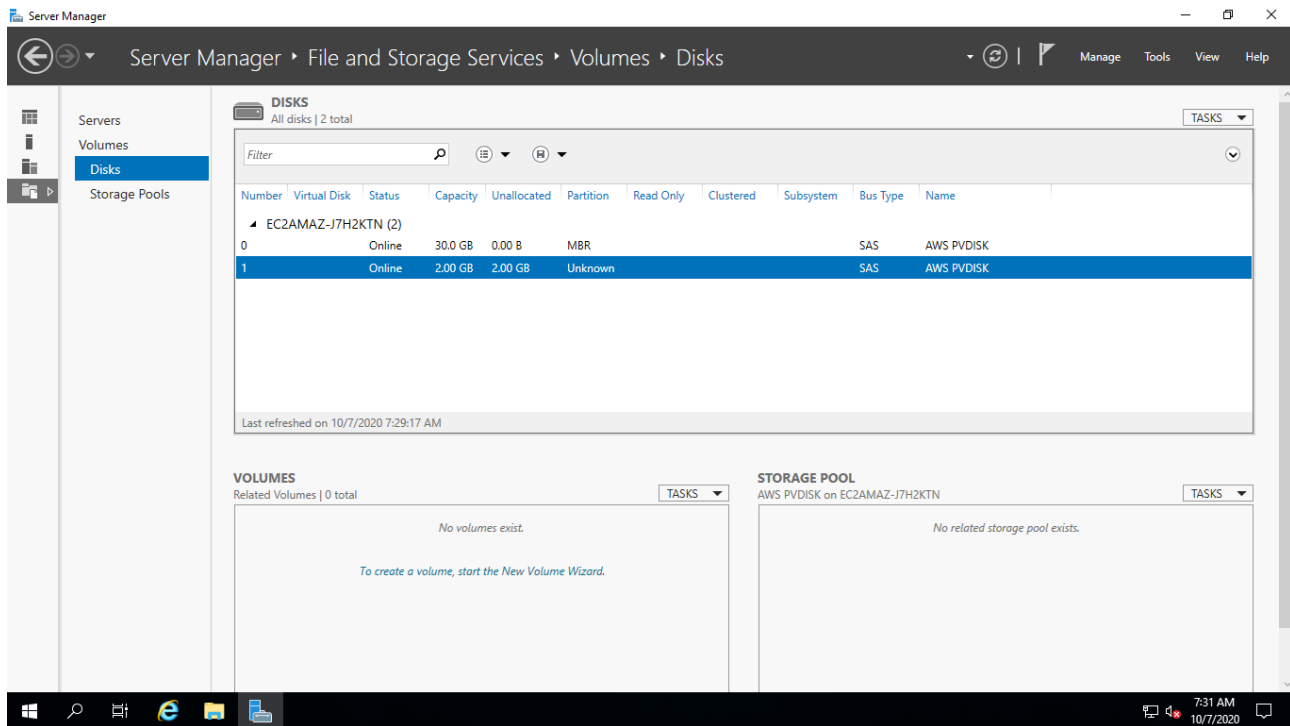
1: Create a windows machine



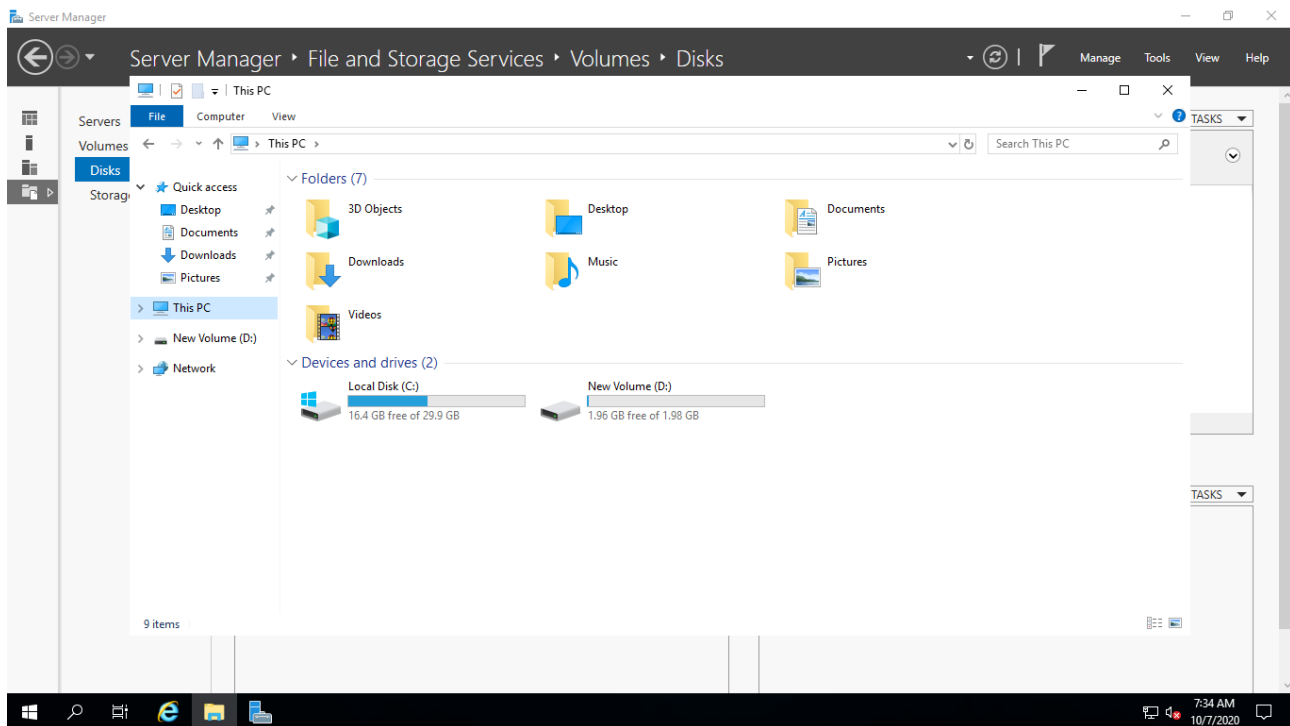
Create a volume in the same region as the windows machine



4: From server manager bring the volume online



4: Check if the volume is mounted successfully



5.terminate ebs volume

The screenshot shows the AWS Management Console with a green banner at the top stating "Successfully terminated i-045c980174f41f29a". Below this, the "Instances (1/2)" table lists two instances:

	Name	Instance ID	Instance state	Instance type	Status check	Alarm Status	Availability zone
<input type="checkbox"/>	ubuntu	i-061cf504b20411d38	Terminated	t2.micro	-	No alarms +	us-east-2a
<input checked="" type="checkbox"/>	ebsvolume	i-045c980174f41f29a	Terminated	t2.micro	2/2 checks ...	No alarms +	us-east-2b

The details for the terminated instance "i-045c980174f41f29a (ebsvolume)" are shown below, with the "Instance state" field indicating "Terminated".

PROJECT 4: Working with Elastic IP's

Step1: Create a linux machine

The screenshot shows the AWS Management Console with a single instance listed in the "Instances (1/1)" table:

	Name	Instance ID	Instance state	Instance type	Status check	Alarm Status	Availability zone
<input checked="" type="checkbox"/>	apache	i-06bbcff5ec6eb3b6d	Running	t2.micro	2/2 checks ...	No alarms +	us-east-2b

The details for the running instance "i-06bbcff5ec6eb3b6d (apache)" are shown below. The "Instance summary" section displays the following information:

- Instance ID: i-06bbcff5ec6eb3b6d (apache)
- Instance state: Running
- Public IPv4 address: 18.219.92.9 | [open address](#)
- Public IPv4 DNS: ec2-18-219-92-9.us-east-2.compute.amazonaws.com | [open address](#)
- Private IPv4 addresses: 172.31.28.141
- Private IPv4 DNS: ip-172-31-28-141.us-east-2.compute.internal

Task 2: Installation of apache

```
Connect to instance | EC2 Manag... x i-06bbcff5ec6eb3b6d (apache) | x +
us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-06bbcff5ec6eb3b6d
Installing : generic-logos-httpd-18.0.0-4.amzn2.noarch 5/9
Installing : mailcap-2.1.41-2.amzn2.noarch 6/9
Installing : httpd-filesystem-2.4.46-1.amzn2.noarch 7/9
Installing : mod_http2-1.15.14-2.amzn2.x86_64 8/9
Installing : httpd-2.4.46-1.amzn2.x86_64 9/9
Verifying : apr-util-1.6.1-5.amzn2.0.2.x86_64 1/9
Verifying : httpd-filesystem-2.4.46-1.amzn2.noarch 2/9
Verifying : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64 3/9
Verifying : httpd-tools-2.4.46-1.amzn2.x86_64 4/9
Verifying : mod_http2-1.15.14-2.amzn2.x86_64 5/9
Verifying : apr-1.6.3-5.amzn2.0.2.x86_64 6/9
Verifying : mailcap-2.1.41-2.amzn2.noarch 7/9
Verifying : generic-logos-httpd-18.0.0-4.amzn2.noarch 8/9
Verifying : httpd-2.4.46-1.amzn2.x86_64 9/9

Installed:
  httpd.x86_64 0:2.4.46-1.amzn2

Dependency Installed:
  apr.x86_64 0:1.6.3-5.amzn2.0.2
  apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2
  httpd-filesystem.noarch 0:2.4.46-1.amzn2
  mailcap.noarch 0:2.1.41-2.amzn2
  apr-util.x86_64 0:1.6.1-5.amzn2.0.2
  generic-logos-httpd.noarch 0:18.0.0-4.amzn2
  httpd-tools.x86_64 0:2.4.46-1.amzn2
  mod_http2.x86_64 0:1.15.14-2.amzn2

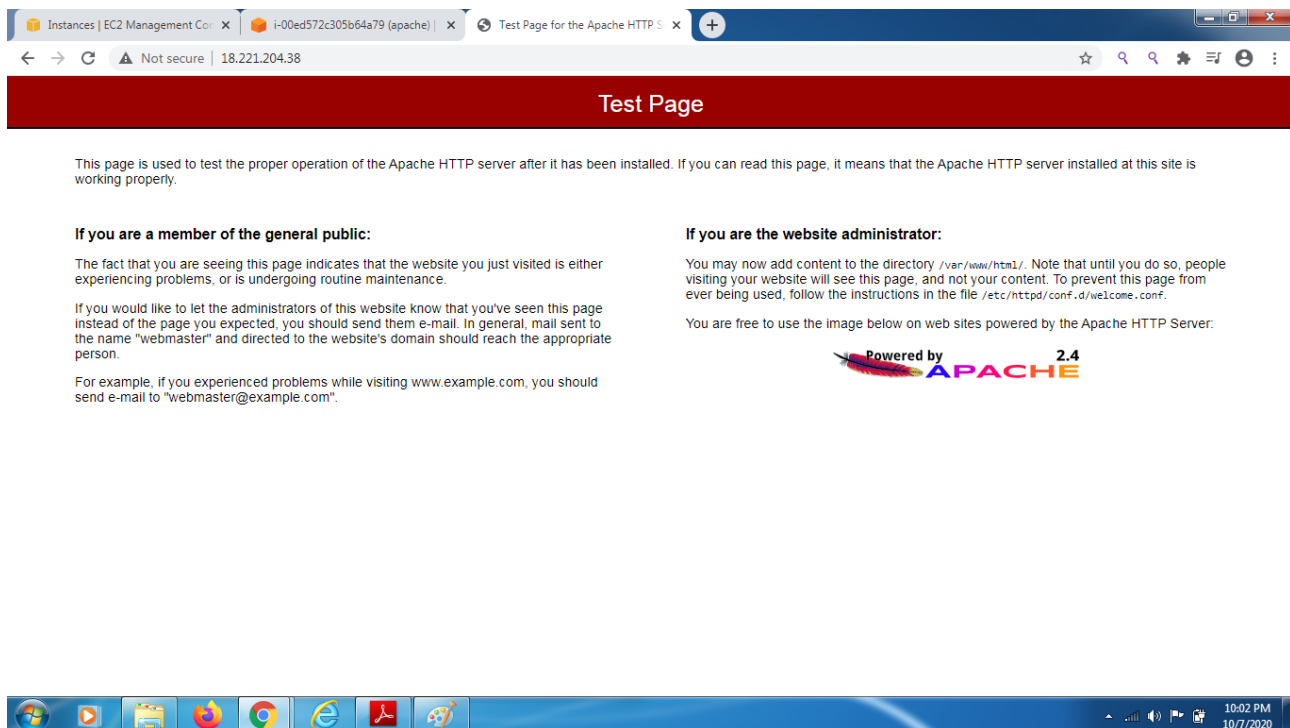
Complete!
[root@ip-172-31-28-141 ec2-user]#
```

i-06bbcff5ec6eb3b6d (apache)

Public IPs: 18.219.92.9 Private IPs: 172.31.28.141

Windows taskbar with icons for Start, Task View, File Explorer, Edge, Chrome, Firefox, and others. System tray shows network, volume, and date/time (12:14 PM 10/8/2020).

Task3: Check the web server status



Task4:Allocate elastic IP

The screenshot shows the AWS Management Console interface for Elastic IP addresses. The top navigation bar includes the AWS logo, 'Services' dropdown, and user information (Lakshmi, Ohio, Support). The main content area is titled 'Elastic IP addresses (1/1)' and features a search bar, a filter for 'Public IPv4 address: 3.129.187.128', and a 'Clear filters' button. A table lists the allocated Elastic IP address:

<input checked="" type="checkbox"/>	Name	Allocated IPv4 address	Type	Allocation ID	Associated instance ID
<input checked="" type="checkbox"/>	Eipdemo	3.129.187.128	Public IP	eipalloc-040e30c66cc47cde5	-

Below the table, the IP address '3.129.187.128' is displayed with tabs for 'Summary' and 'Tags'. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 12:32 PM on 10/8/2020.

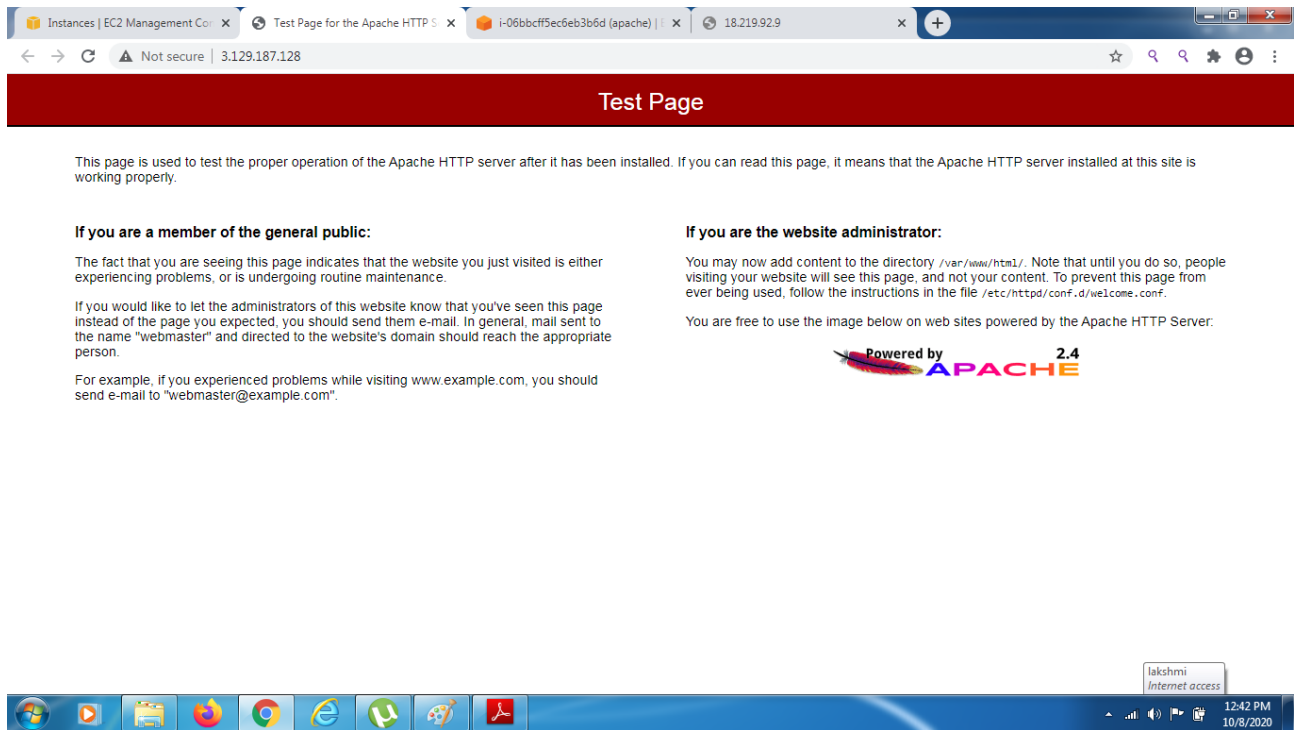
Task5:associate elastic IP

The screenshot shows the AWS Management Console interface after successfully associating the Elastic IP address with an instance. A green notification banner at the top states: 'Elastic IP address associated successfully. Elastic IP address 3.129.187.128 has been associated with instance i-06bbcff5ec6eb3b6d'. The main content area is titled 'Elastic IP addresses (1/1)' and features a search bar, a filter for 'Public IPv4 address: 3.129.187.128', and a 'Clear filters' button. A table lists the allocated Elastic IP address:

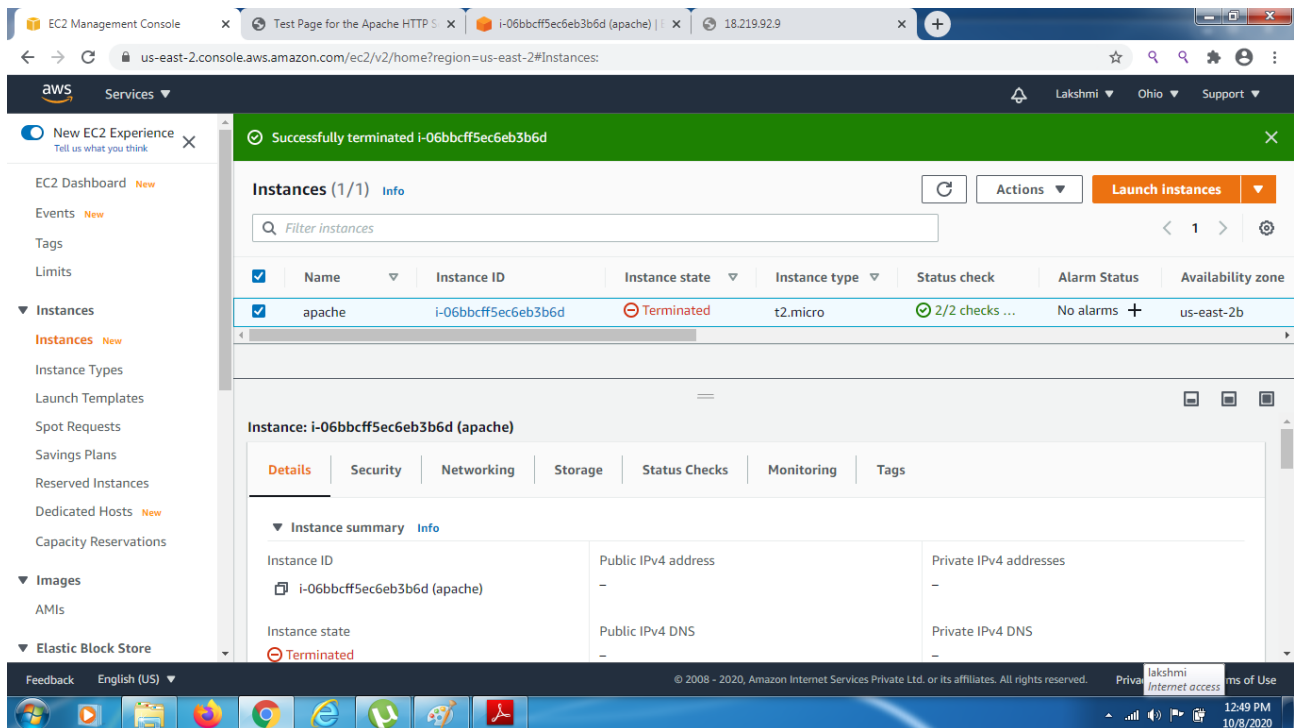
<input checked="" type="checkbox"/>	Name	Allocated IPv4 address	Type	Allocation ID	Associated instance ID
<input checked="" type="checkbox"/>	Eipdemo	3.129.187.128	Public IP	eipalloc-040e30c66cc47cde5	i-06bbcff5ec6eb3b6d

Below the table, the IP address '3.129.187.128' is displayed with tabs for 'Summary' and 'Tags'. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 12:39 PM on 10/8/2020.

Task5:checking webserver using elastic IP



Task6:terminate the apache instance



Task7:Release the ElasticIP

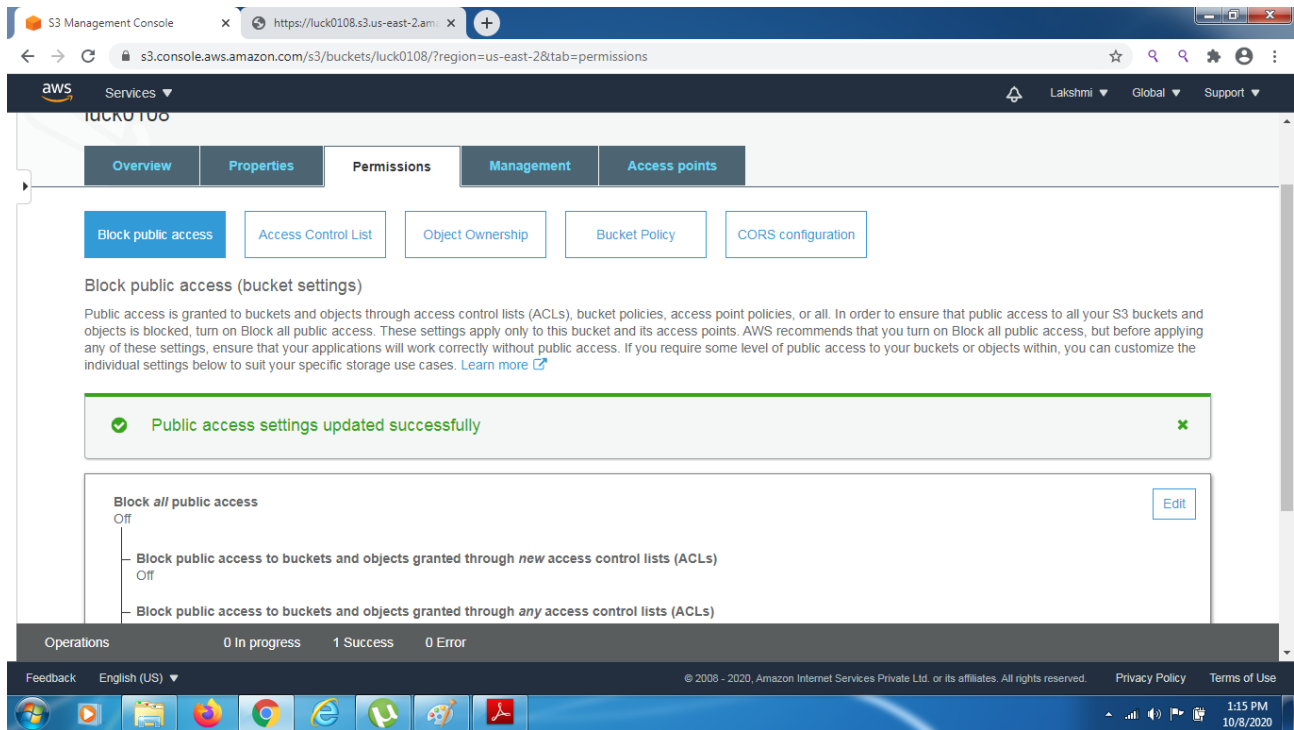
The screenshot shows the AWS Management Console for the 'us-east-2' region. A green banner at the top indicates 'Elastic IP addresses released. Elastic IP addresses 3.129.187.128'. The left sidebar shows the navigation menu with 'Elastic IPs' highlighted under 'Network & Security'. The main content area is titled 'Elastic IP addresses' and shows a table with columns: Name, Allocated IPv4 address, Type, Allocation ID, and Associated Instance. The table is currently empty, displaying 'No Elastic IP addresses found in this region'. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 12:46 PM on 10/8/2020.

PROJECT 5: Working with S3

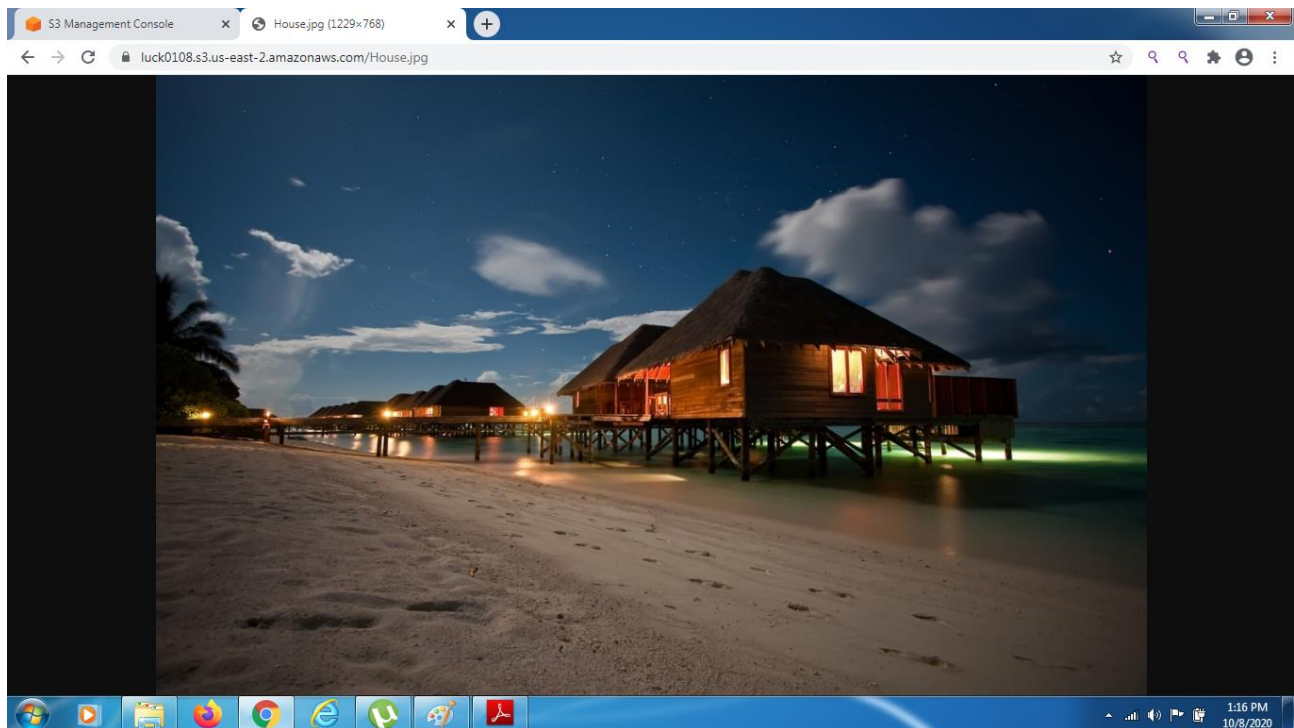
Task1:create a s3 bucket

The screenshot shows the AWS S3 Management Console for the 'us-east-2' region. The left sidebar shows the navigation menu with 'Buckets' highlighted. The main content area is titled 'S3 buckets' and shows a table with columns: Bucket name, Access, Region, and Date created. The table lists two buckets: '01081994' and 'luck0108', both with 'Objects can be public' access and located in 'US East (Ohio)'. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 1:17 PM on 10/8/2020.

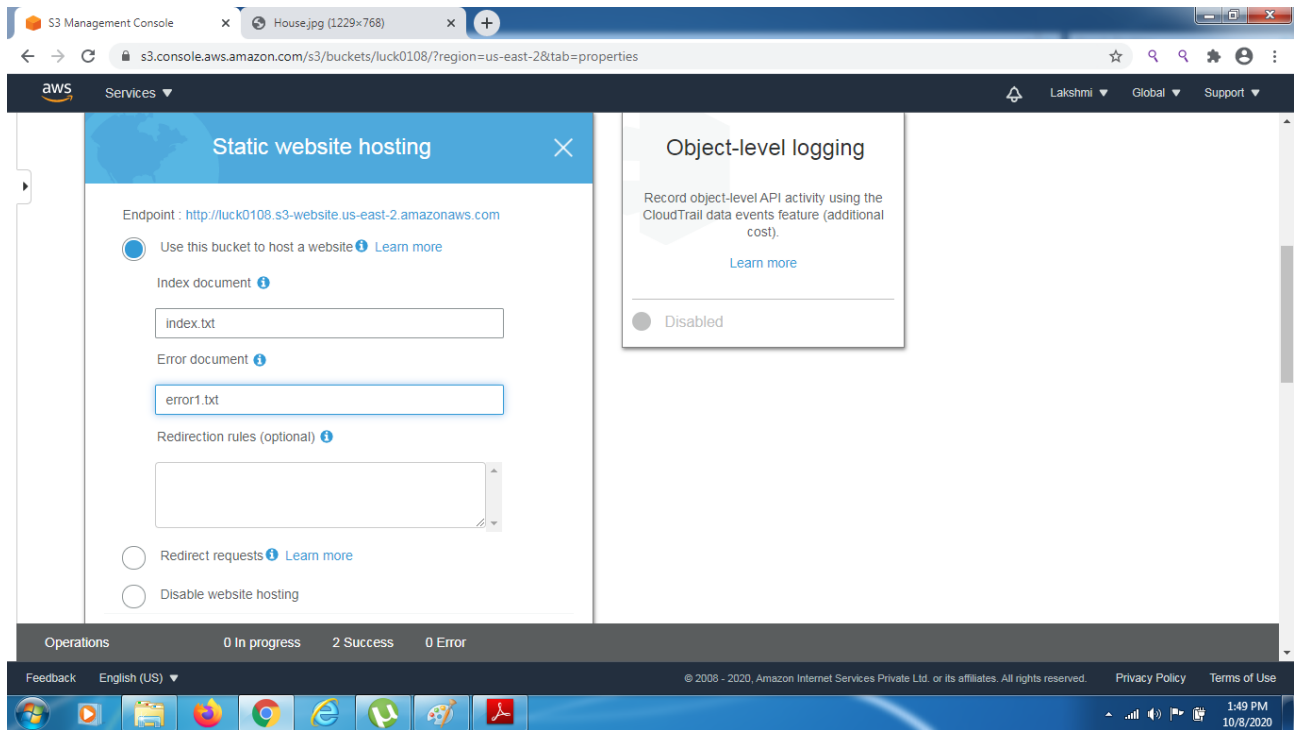
Task 2: making public of a file in s3 bucket



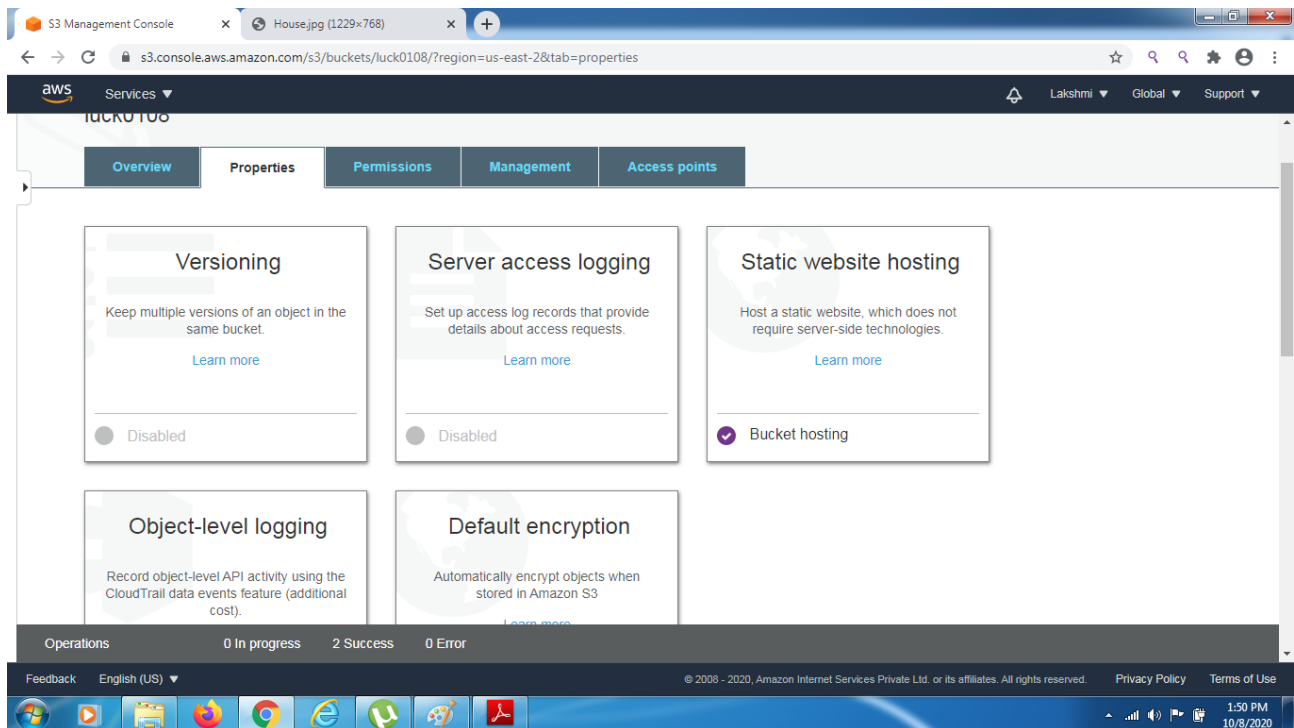
Task 3: s3 image



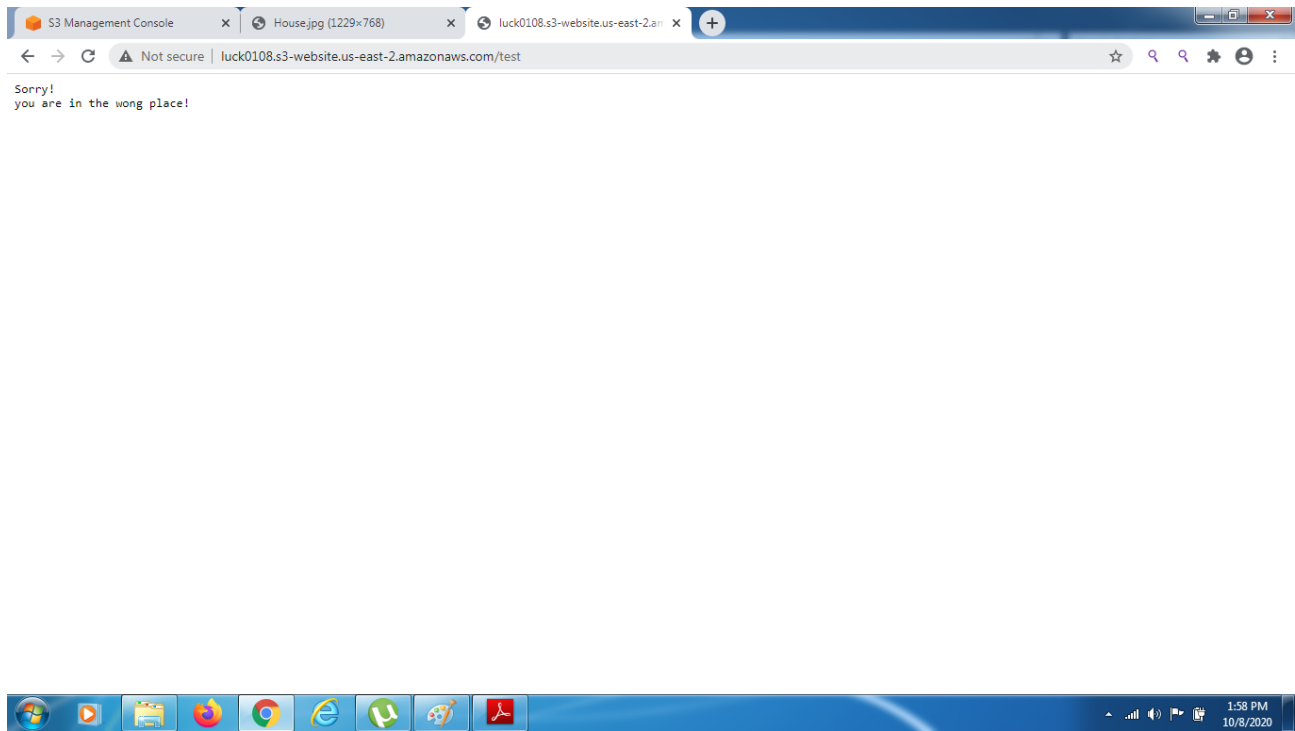
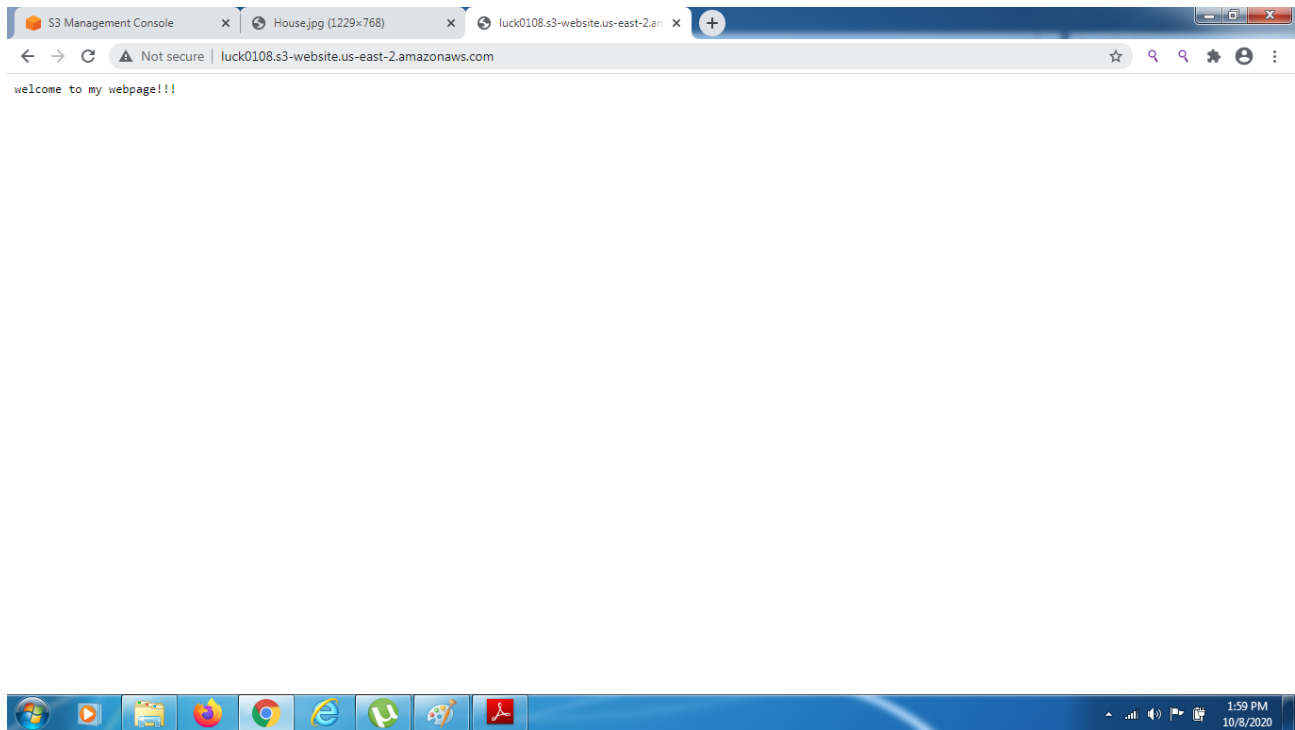
Task4: static web hosting



Task 5: Hosting of a bucket



Task 6: showing of index and error web pages



Versioning

The screenshot shows the AWS S3 Management Console interface for the bucket 'sat1309'. The 'Overview' tab is selected. A search bar is present at the top. Below the search bar, there are buttons for 'Upload', 'Create folder', 'Download', and 'Actions'. The 'Versions' section shows 'Hide' and 'Show' buttons. The 'US East (Ohio)' region is selected. The table below shows the following data:

Name	Last modified	Size	Storage class
versioning.txt	Oct 8, 2020 2:23:50 PM GMT+0530	39.0 B	Standard

Operations: 0 In progress, 11 Success, 0 Error. The bottom status bar shows the time as 2:23 PM on 10/8/2020.

Create another version text document and show

The screenshot shows the AWS S3 Management Console interface for the bucket 'sat1309' with versioning enabled. The 'Overview' tab is selected. The 'Versions' section shows 'Hide' and 'Show' buttons. The 'US East (Ohio)' region is selected. The table below shows the following data:

Name	Version ID	Last modified	Size	Storage class
versioning.txt		Oct 8, 2020 2:25:48 PM		
Oct 8, 2020 2:25:48 PM (Latest version)	FyPmYOgYgZPKBHbbE37XXlq...		53.0 B	Standard
Oct 8, 2020 2:23:50 PM	ah3ECL8iM_sAZAbyJbEsC3.kl...		39.0 B	Standard

Operations: 0 In progress, 12 Success, 0 Error. The bottom status bar shows the time as 2:26 PM on 10/8/2020.

Delete and backup of versions

The screenshot shows the AWS S3 Management Console interface. The top navigation bar includes the AWS logo, 'Services', and user information. The main content area displays the 'versions' tab for a bucket named 'sat1309' in the 'us-east-2' region. The table lists the following versions of 'versioning.txt':

Name	Version ID	Last modified	Size	Storage class
versioning.txt		Oct 8, 2020 2:30:38 PM		
Oct 8, 2020 2:30:38 PM (Latest version)	SeDO13x5yTYOgiVoGCuQQ3dJ...		53.0 B	Standard
Oct 8, 2020 2:28:13 PM (Delete marker)	f1yxEiSF.E8gcmH14bsY9ebLZZ...		--	--
Oct 8, 2020 2:25:48 PM	FyPmiYOGyGZPKBHbbE37XXIq...		53.0 B	Standard
Oct 8, 2020 2:23:50 PM	ah3ECL8iM__sAZAbyJJbEsC3.kl...		39.0 B	Standard

The bottom status bar indicates '0 In progress', '14 Success', and '0 Error'.

QUESTION 1:

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

Stop and start the instance: when we stop the instance , the instance stop and there is nothing to show the public and private ip

When we start the instance the public ip and private ip will automatically change. it will have new public and private ip address

Reboot: when we reboot ,the instance is rebooted. there is nothing change in the private and public ip address

Terminate: when we terminated the instance will automatically shutting down. there is no another chance to restart. And we have to launch the new instance.

