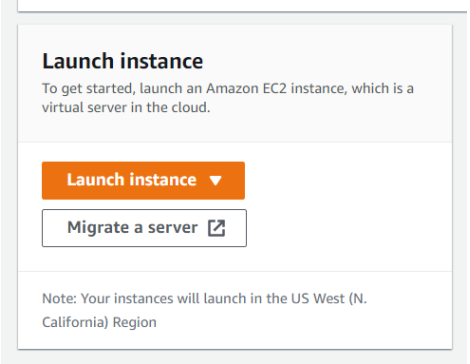
Name	Sneha Reddy
Enrolment Number	A704052190
Experiment Number	5
Batch	1

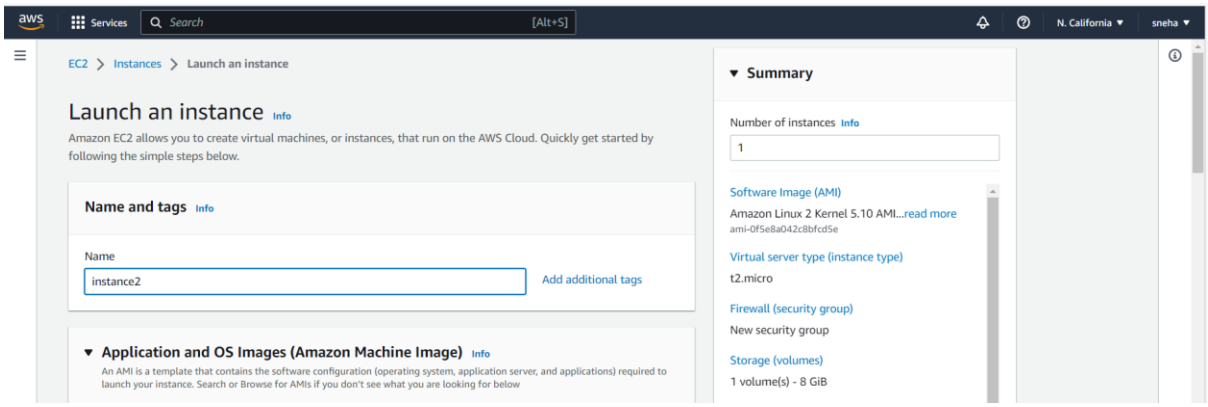
AIM OF THE EXPERIMENT: a) Create an EC2 instance.
b) Demonstrate the working of static and dynamic website through EC2.
c) Shift files from S3 to EC2.
d) Shift files from EC2 to S3.

Create an EC2 instance

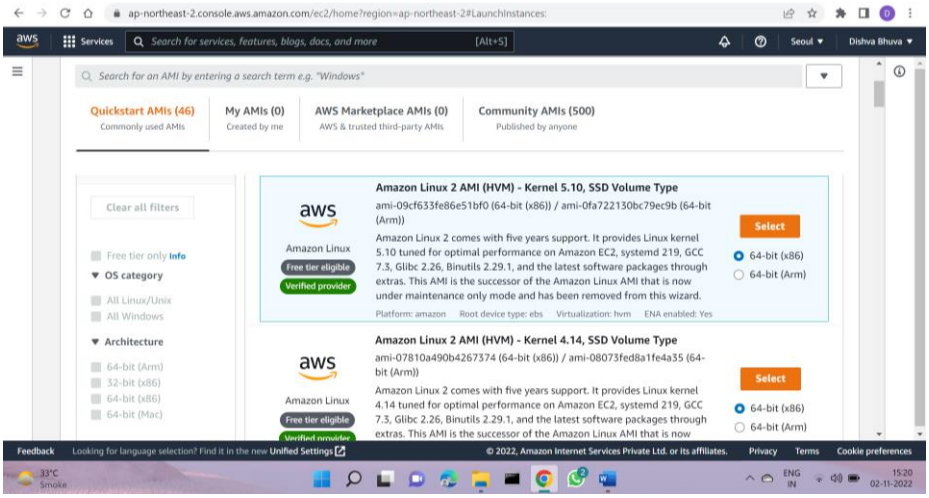
Type EC2 in console

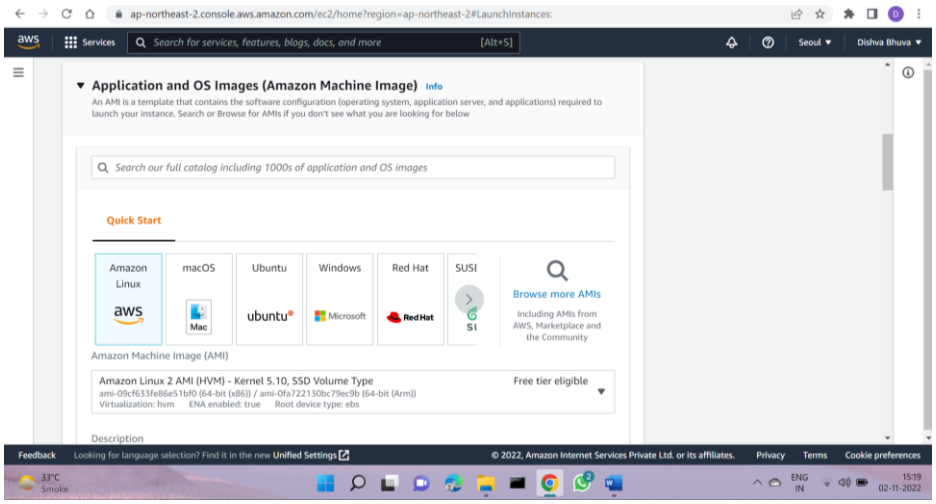
Click on **Launch Instance**.





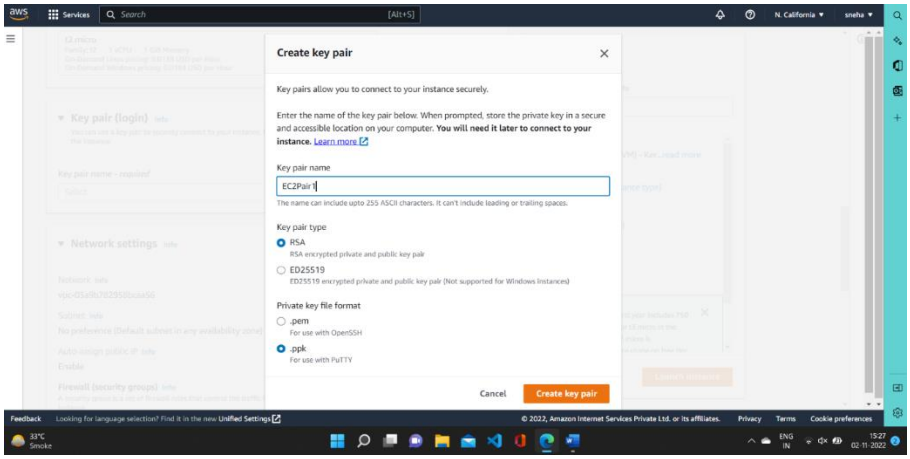
Choose an Amazon Machine Image (AMI), find an Amazon Linux 2 AMI at the top of the list and choose **Select**.

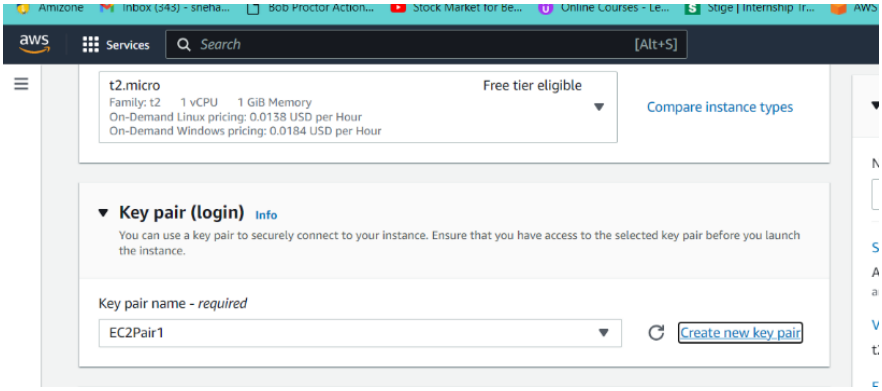




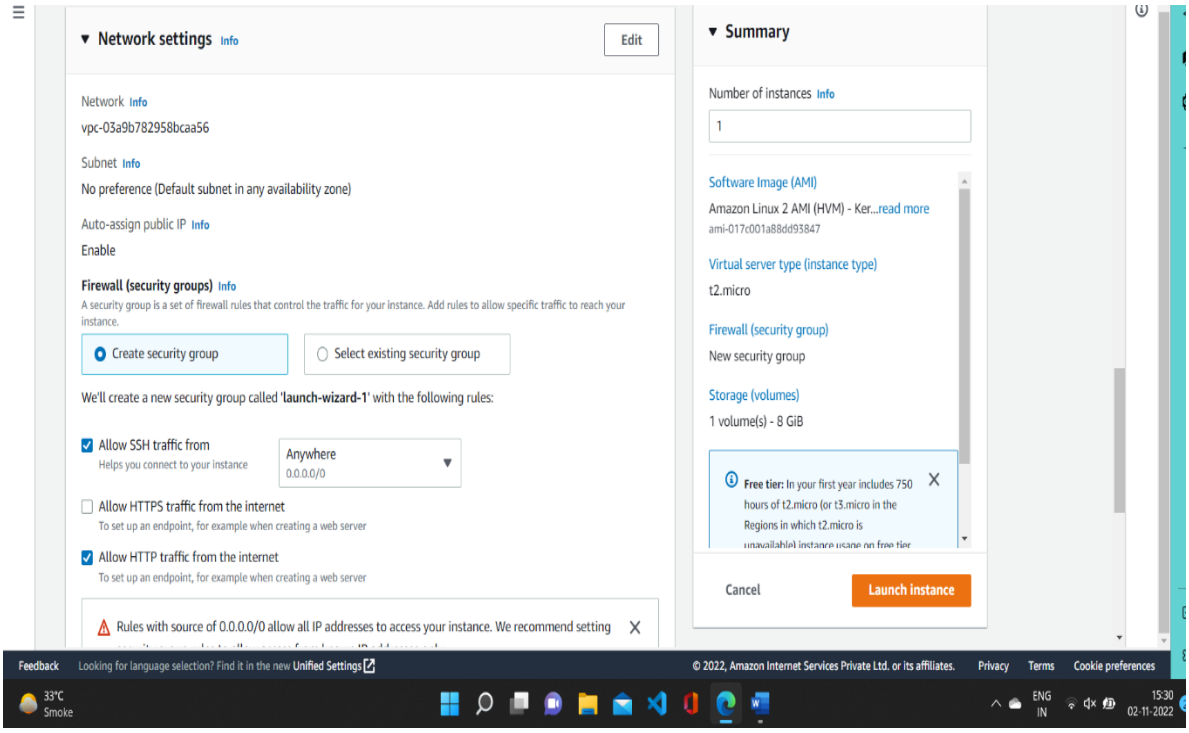
Step 2:Create Key Pair.

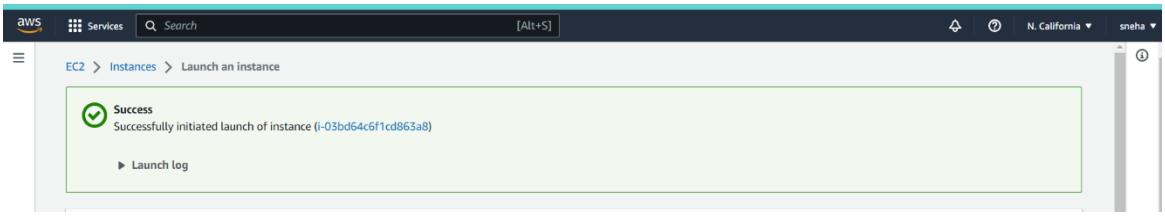
While creating key pair keep mind that you choose Rsa key pair ppk file format





In Network Setting make sure you allow Http traffic from the internet

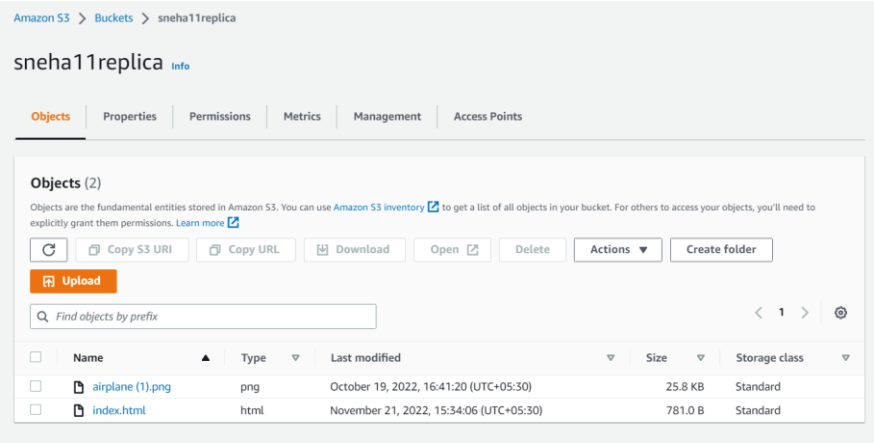




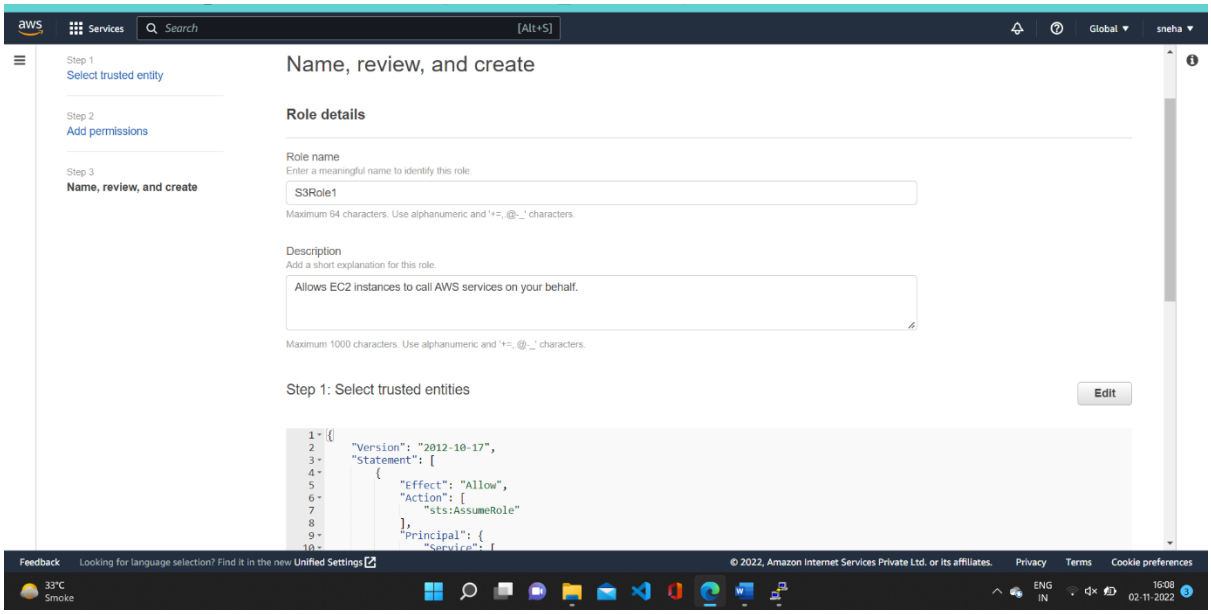
Demonstrate the working of static and dynamic website through EC2

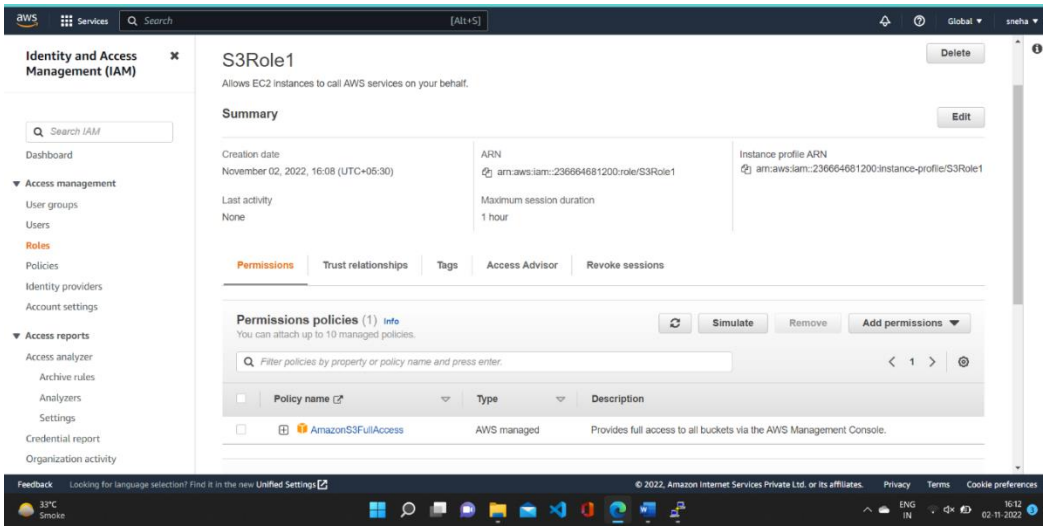
Static Website

1. Upload website's files and folders into S3 bucket.

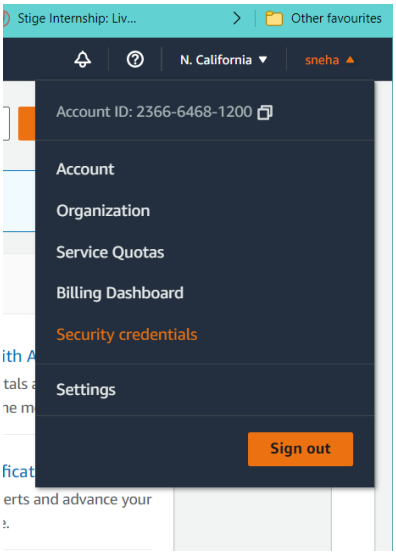


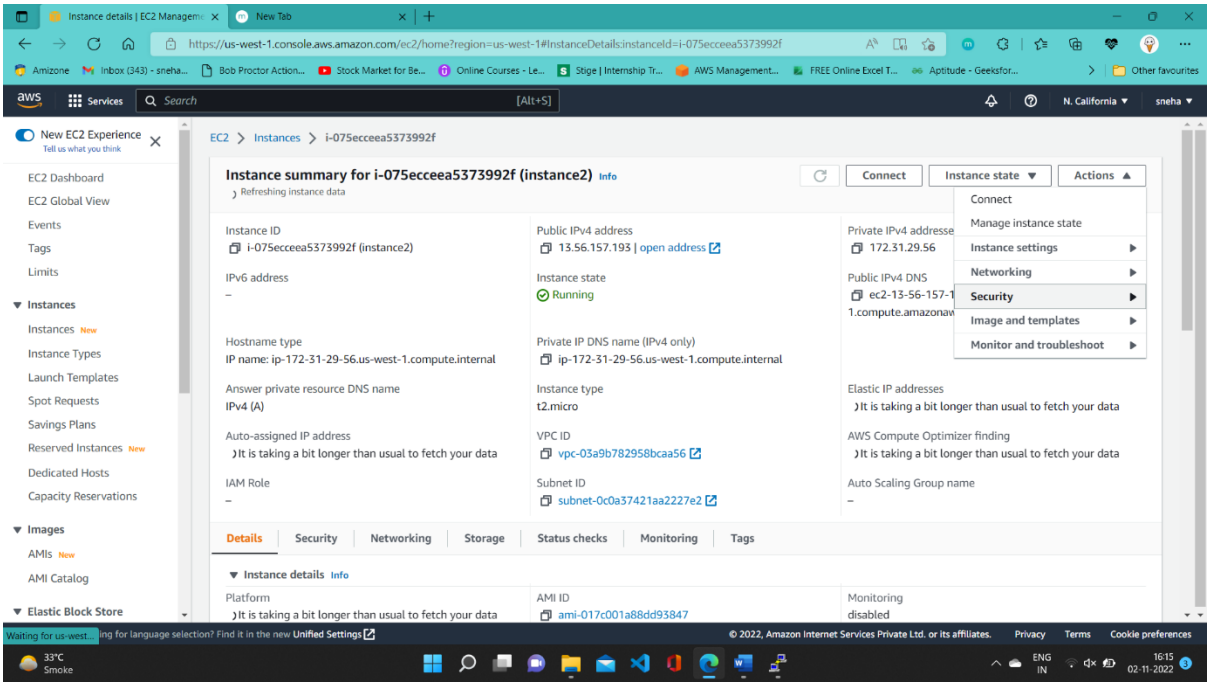
2. Create IAM Role.

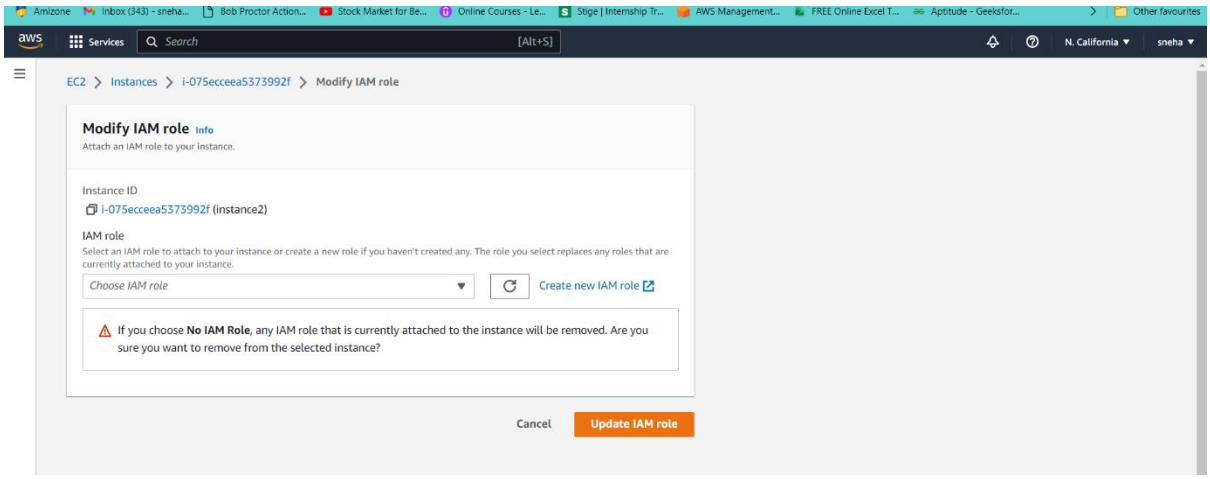


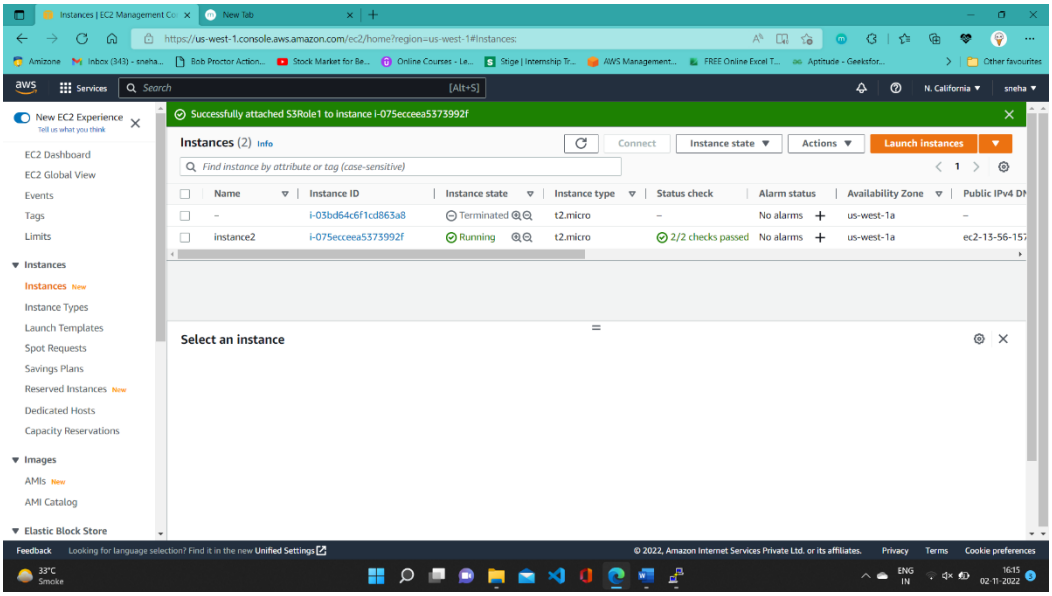


3. Attach IAM role to EC2 instance. Select the EC2 instance and go to Actions -> Security -> Modify IAM Role. Select the IAM Role and click on Update IAM Role.




Instance details | EC2 Management
New Tab
https://us-west-1.console.aws.amazon.com/ec2/home?region=us-west-1#InstanceDetails:instanceId=i-075eccea5373992f
Services
Search
[Alt+S]
N. California
sneha
New EC2 Experience
Tell us what you think
EC2 Dashboard
EC2 Global View
Events
Tags
Limits
Instances
Instances New
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances New
Dedicated Hosts
Capacity Reservations
Images
AMIs New
AMI Catalog
Elastic Block Store
EC2 > Instances > i-075eccea5373992f
Instance summary for i-075eccea5373992f (instance2) Info
Refreshing instance data
Connect
Instance state
Actions
Connect
Manage instance state
Instance settings
Networking
Security
Image and templates
Monitor and troubleshoot
Instance ID
i-075eccea5373992f (instance2)
Public IPv4 address
13.56.157.193 | open address
Private IPv4 addresses
172.31.29.56
IPv6 address
–
Instance state
Running
Public IPv4 DNS
ec2-13-56-157-1
1.compute.amazonaw
Hostname type
IP name: ip-172-31-29-56.us-west-1.compute.internal
Private IP DNS name (IPv4 only)
ip-172-31-29-56.us-west-1.compute.internal
Answer private resource DNS name
IPv4 (A)
Instance type
t2.micro
Elastic IP addresses
It is taking a bit longer than usual to fetch your data
Auto-assigned IP address
It is taking a bit longer than usual to fetch your data
VPC ID
vpc-03a9b782958bcaa56
AWS Compute Optimizer finding
It is taking a bit longer than usual to fetch your data
IAM Role
–
Subnet ID
subnet-0c0a37421aa2227e2
Auto Scaling Group name
–
Details
Security
Networking
Storage
Status checks
Monitoring
Tags
Instance details Info
Platform
It is taking a bit longer than usual to fetch your data
AMI ID
ami-017c001a88dd93847
Monitoring
disabled
© 2022, Amazon Internet Services Private Ltd. or its affiliates.
Privacy
Terms
Cookie preferences


Services
Search
[Alt+S]
N. California
sneha
EC2 > Instances > i-075eccea5373992f > Modify IAM role
Modify IAM role Info
Attach an IAM role to your instance.
Instance ID
i-075eccea5373992f (instance2)
IAM role
Select an IAM role to attach to your instance or create a new role if you haven't created any. The role you select replaces any roles that are currently attached to your instance.
Choose IAM role
Create new IAM role
If you choose No IAM Role, any IAM role that is currently attached to the instance will be removed. Are you sure you want to remove from the selected instance?
Cancel
Update IAM role

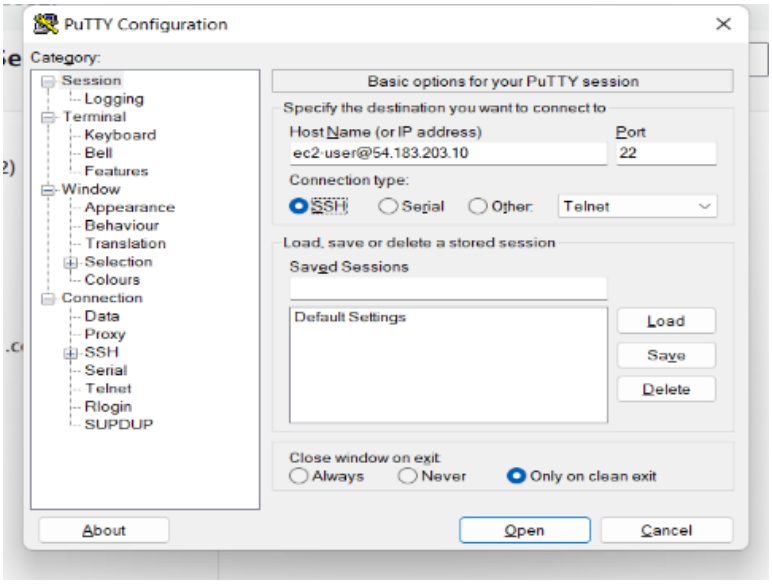

Instances | EC2 Management
New Tab
https://us-west-1.console.aws.amazon.com/ec2/home?region=us-west-1#Instances:
Services
Search
[Alt+S]
N. California
sneha
Successfully attached S3Role1 to instance i-075eccea5373992f
Instances (2) Info
Connect
Instance state
Actions
Launch instances
Find instance by attribute or tag (case-sensitive)
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
Availability Zone
Public IPv4 DN
–
i-03bd64c6f1cd863a8
Terminated
t2.micro
–
No alarms
us-west-1a
instance2
i-075eccea5373992f
Running
t2.micro
2/2 checks passed
No alarms
us-west-1a
Select an instance
Feedback
Looking for language selection? Find it in the new Unified Settings
© 2022, Amazon Internet Services Private Ltd. or its affiliates.
Privacy
Terms
Cookie preferences

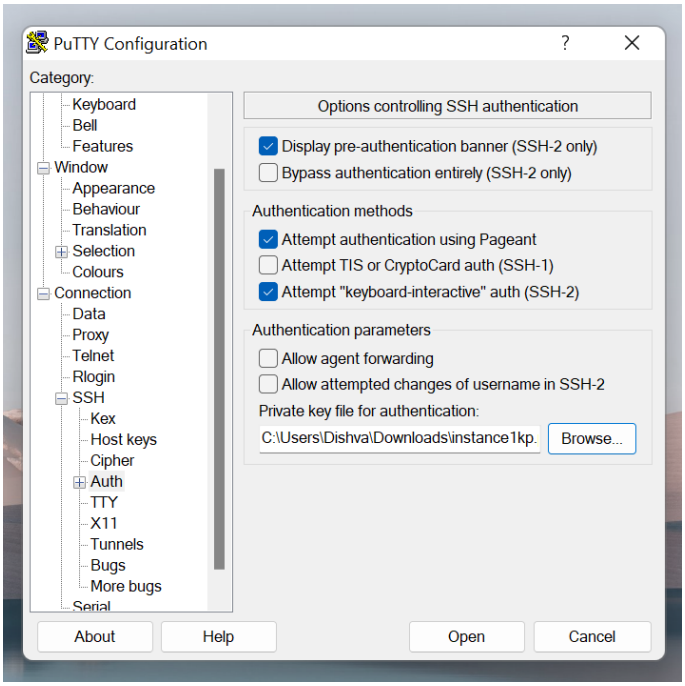
To Connect Putty

Now, you want to connect to EC2 by using Putty. Copy public IPv4 address of EC2 instance.

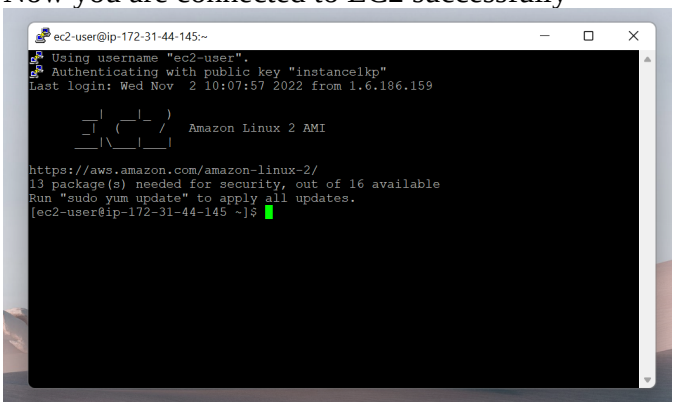
Open Putty and start a new remote session and enter the host name as “ec2-user@<IPv4 address>”

Click on SSH. Click on Auth and then Credentials. Check Use private key and browse location of key. Click OK.



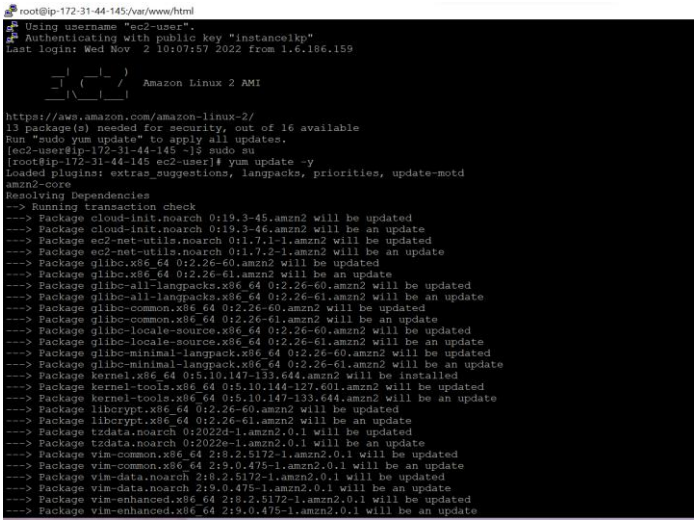


4. Now you are connected to EC2 successfully



Perform command

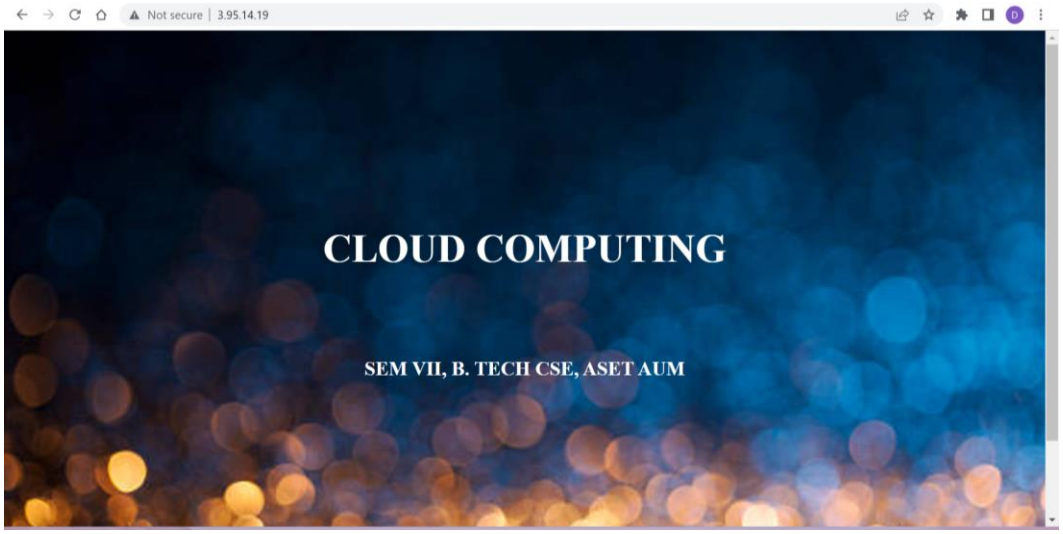
Sudo su
Yum install httpd -y
To change Directory – cd /var/www/html
ls
wget object url
service httpd start



```
[root@ip-172-31-25-44 ec2-user]# pwd
/home/ec2-user
[root@ip-172-31-25-44 ec2-user]# ls
[root@ip-172-31-25-44 ec2-user]# cd /var/www/html
[root@ip-172-31-25-44 html]# ls
[root@ip-172-31-25-44 html]# wget http://firstbktcc.s3-website.ap-south-1.amazon
aws.com
--2022-11-04 05:02:08--  http://firstbktcc.s3-website.ap-south-1.amazonaws.com/
Resolving firstbktcc.s3-website.ap-south-1.amazonaws.com (firstbktcc.s3-website.
ap-south-1.amazonaws.com)... 52.219.62.74
Connecting to firstbktcc.s3-website.ap-south-1.amazonaws.com (firstbktcc.s3-webs
ite.ap-south-1.amazonaws.com)|52.219.62.74|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 781 [text/html]
Saving to: 'index.html'

100%[======================================>] 781         --.-K/s   in 0s

2022-11-04 05:02:08 (106 MB/s) - 'index.html' saved [781/781]

[root@ip-172-31-25-44 html]# service httpd start
Redirecting to /bin/systemctl start httpd.service
[root@ip-172-31-25-44 html]#
```

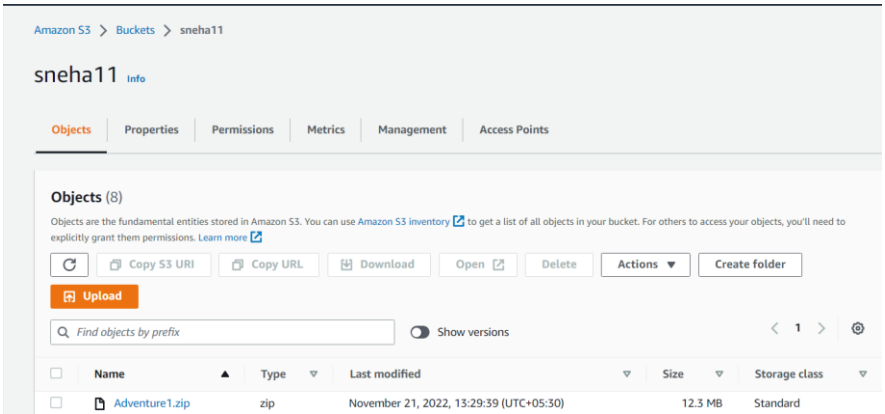
Go to EC2 instance and click on the public IPv4 address or open it in the browser window. It shows the website which is uploaded in the S3 bucket

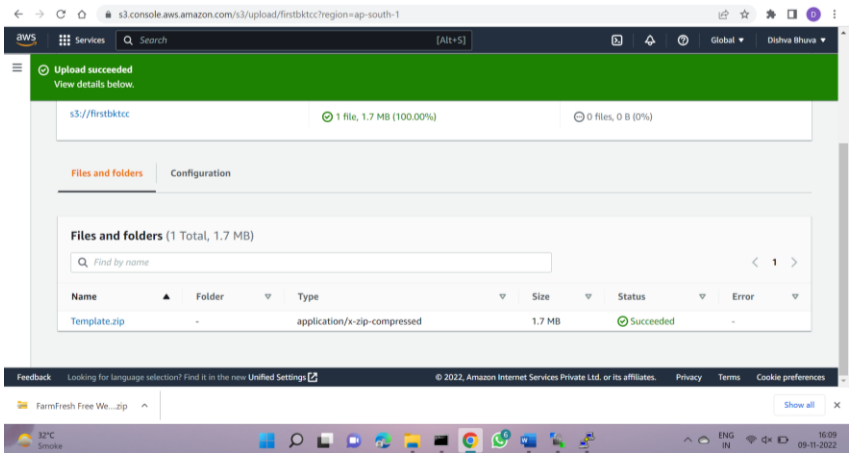
.



Dynamic Website

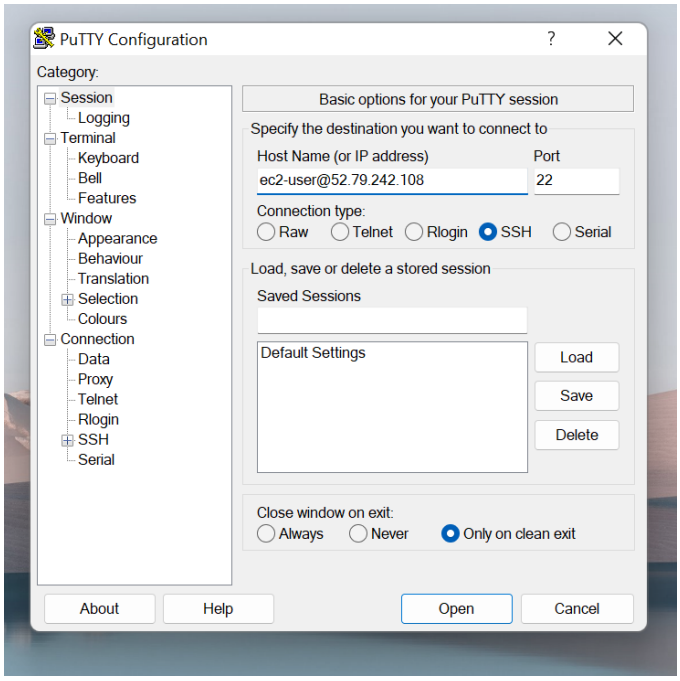
Upload website's files and folders into S3 bucket.



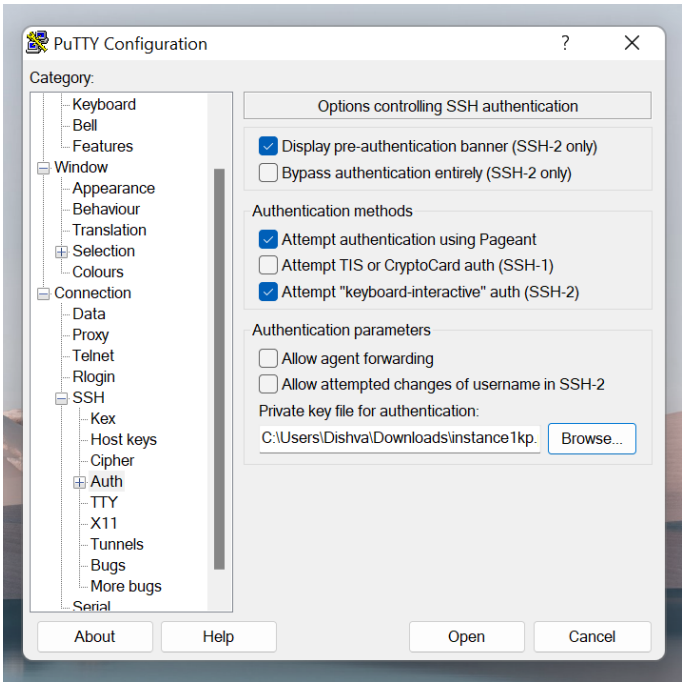


Now, you want to connect to EC2 by using Putty. Copy public IPv4 address of EC2 instance.

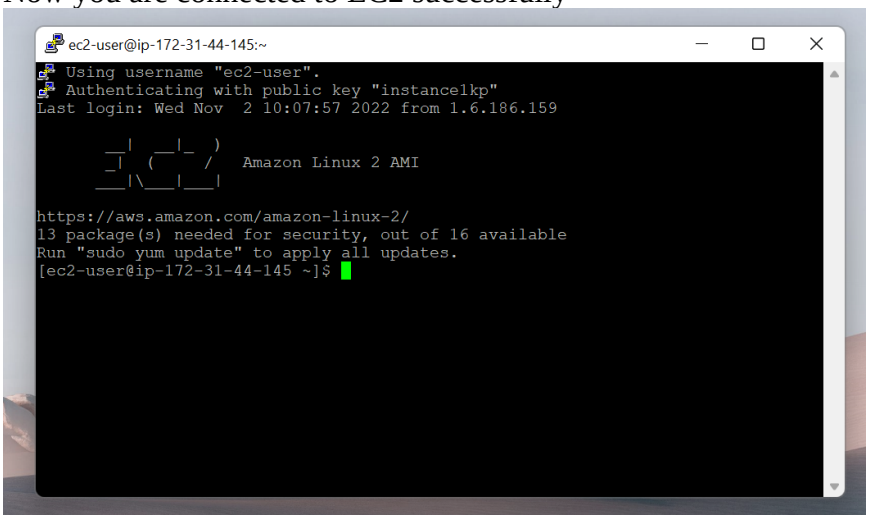
Open Putty and start a new remote session and enter the host name as “ec2-user@<IPv4 address>”



Click on SSH. Click on Auth and then Credentials. Check Use private key and browse location of key. Click OK.

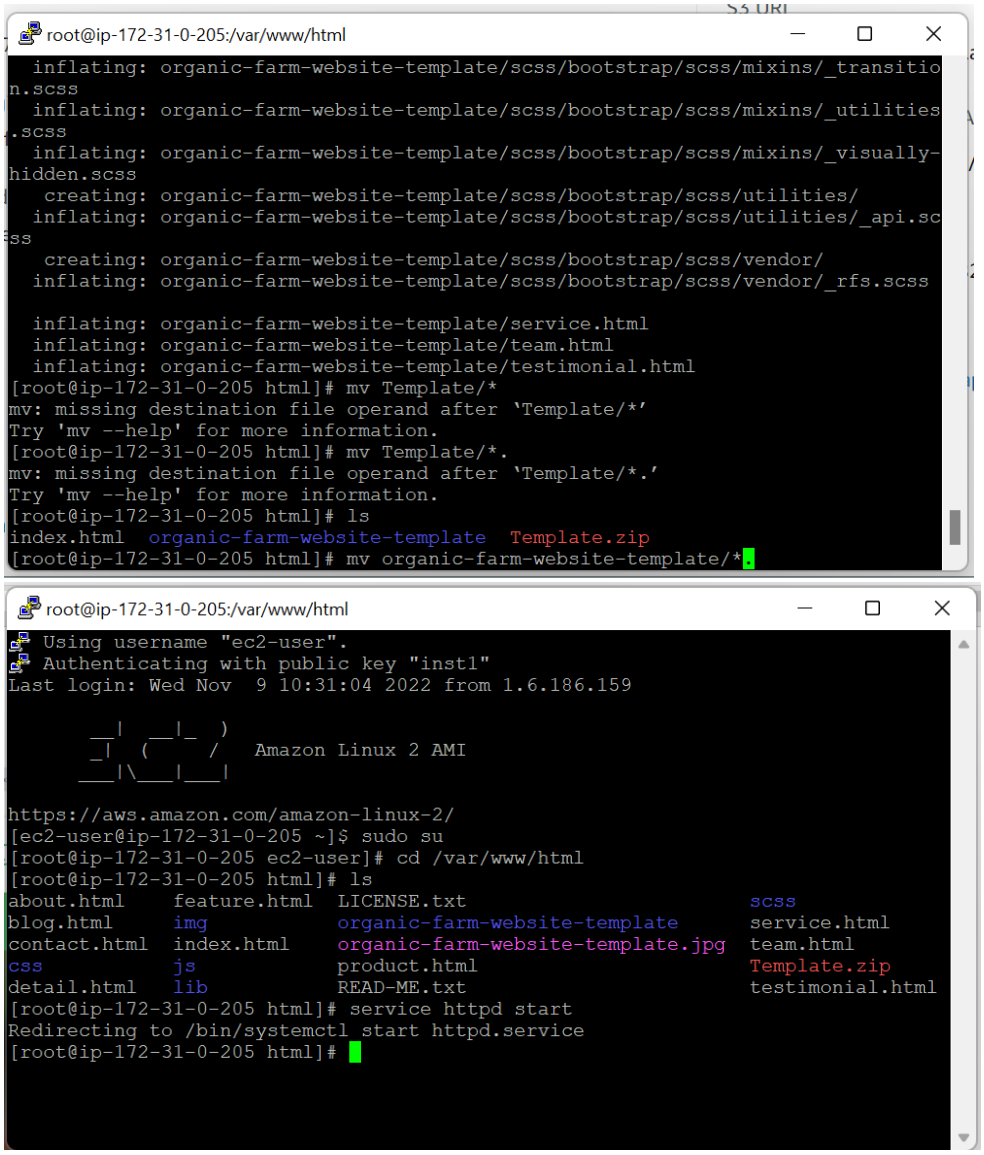


Now you are connected to EC2 successfully

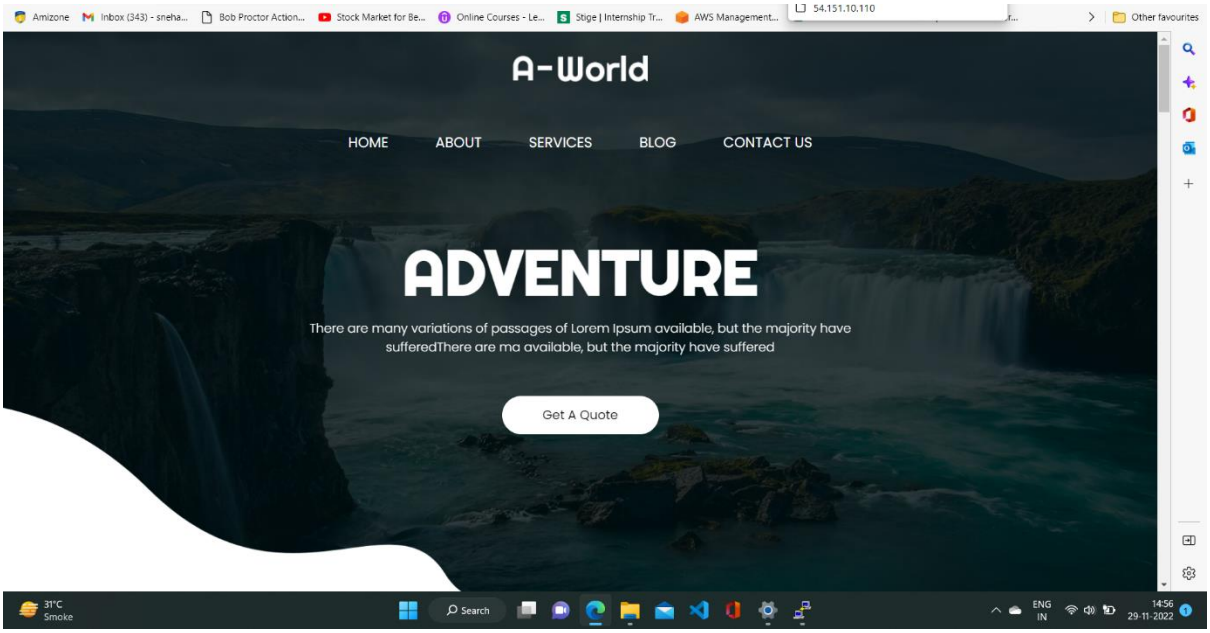


Copy content of website from S3 to directory /var/www/html in EC2 using the command "***wget <object URL of the file in S3 bucket>***".

Unzip the file using command "***unzip <filename>***". And move the files to the current folder using ***mv*** command. Then, start the web server using the command "***service httpd start***".



Go to EC2 instance and click on the public IPv4 address or open it in the browser window. It shows the website which is uploaded in the S3 bucket.

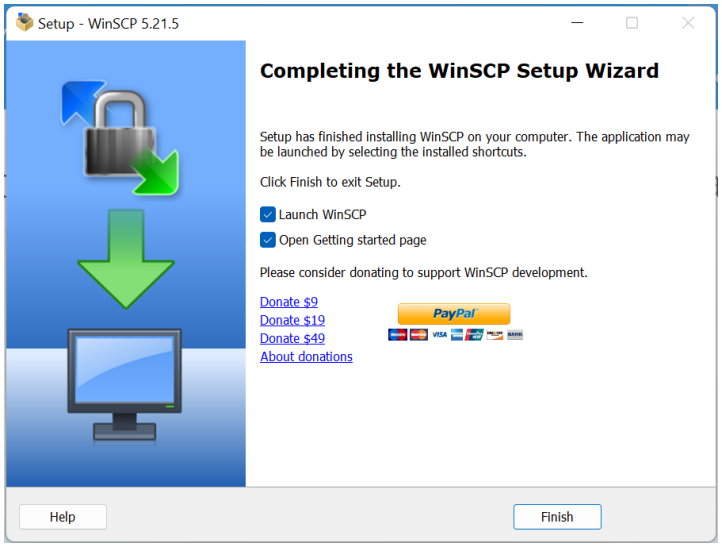


Shift files from S3 to EC2

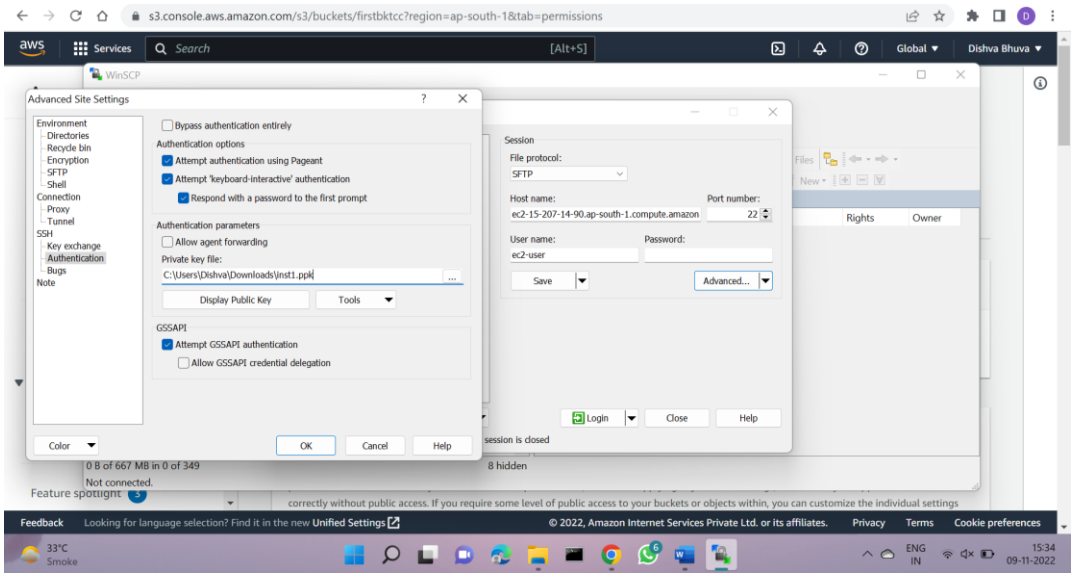
Shown in steps 4 to 10 of previous part of **Demonstrate the working of static and dynamic website through EC2 -> Static Website**

Shift files from EC2 to S3

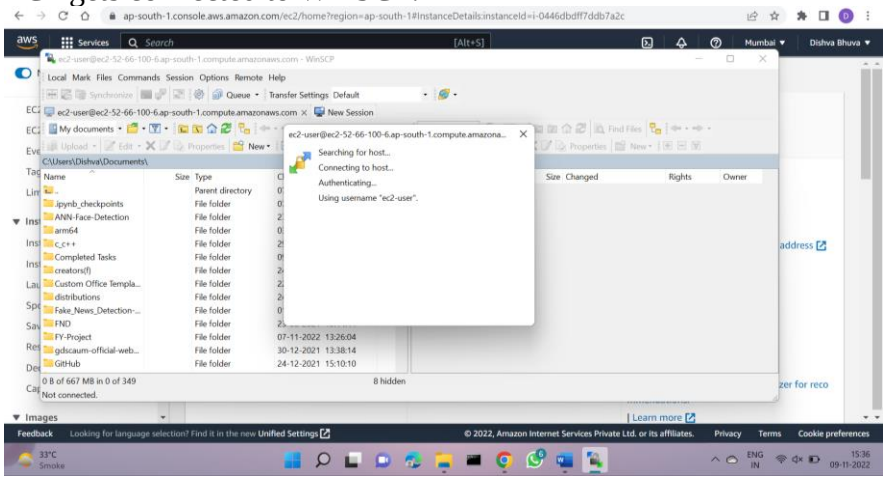
Install WinSCP software.



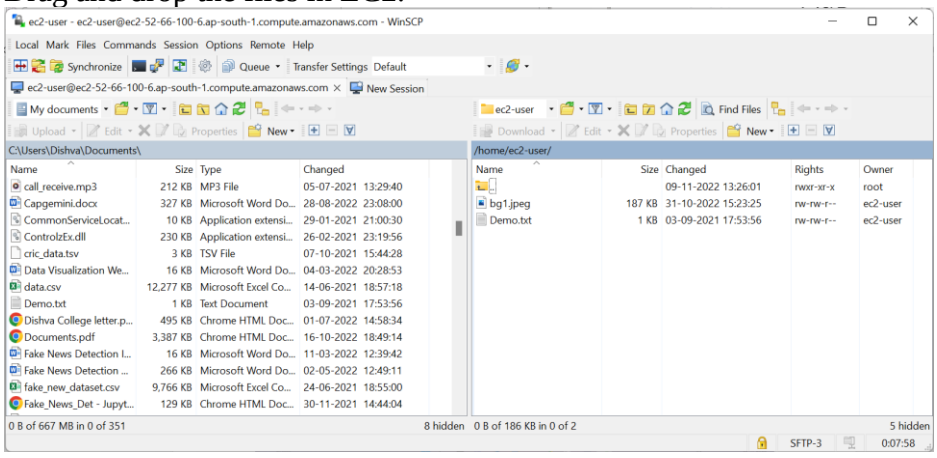
Copy Public IPv4 DNS and paste it in the Host name of the session. Keep User name as ec2-user. Go to Advanced Site Settings and browse the Private key file.



EC2 gets connected to WinSCP.

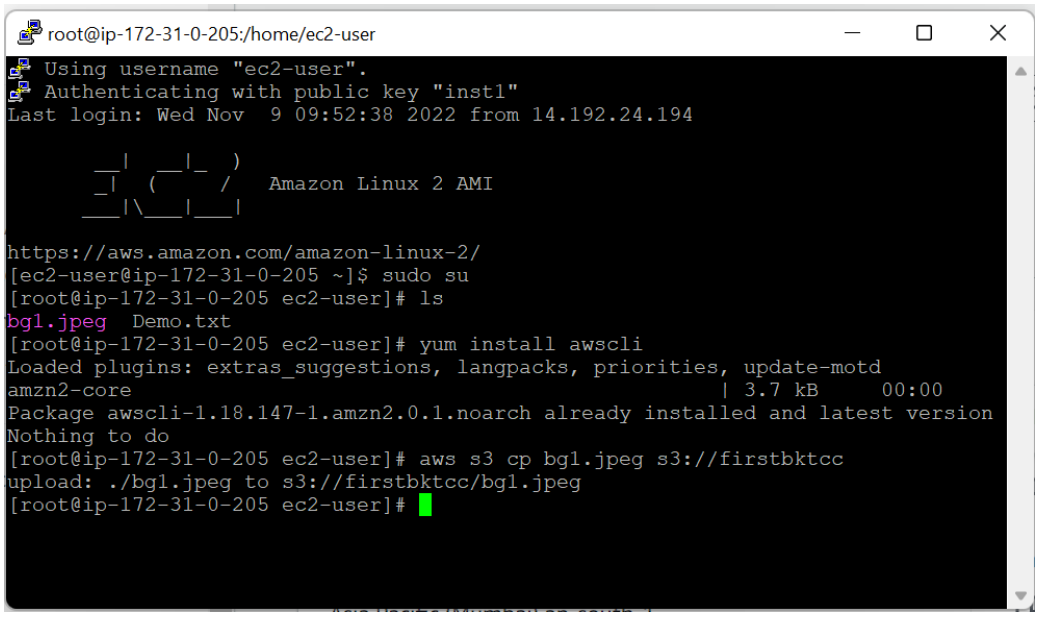


Drag and drop the files in EC2.



Connect EC2 through Putty (shown in previous part Static Website). Switch to root user and perform ***ls*** command . Files that are inserted in previous step are visible. Install aws command line using the command "***yum install awscli***".

Copy the file to the bucket using the command “aws s3 cp <filename> <S3 URI of the bucket>”.



Go to the bucket from AWS Console and check if the transferred files are visible.