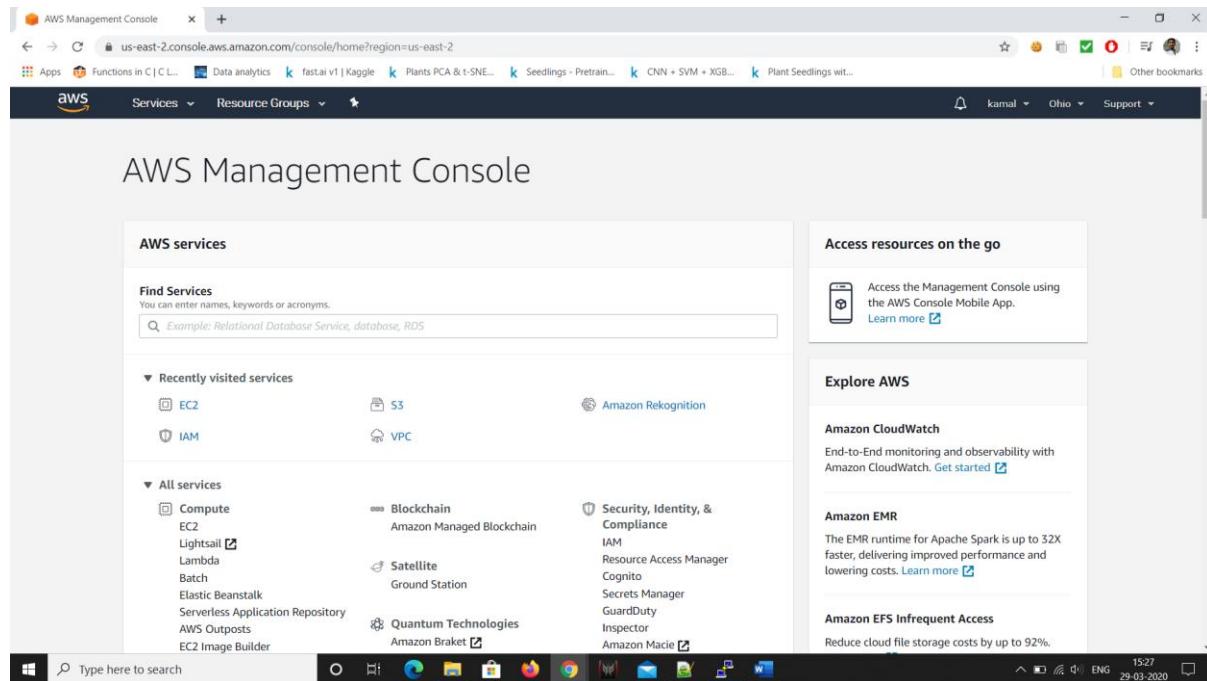


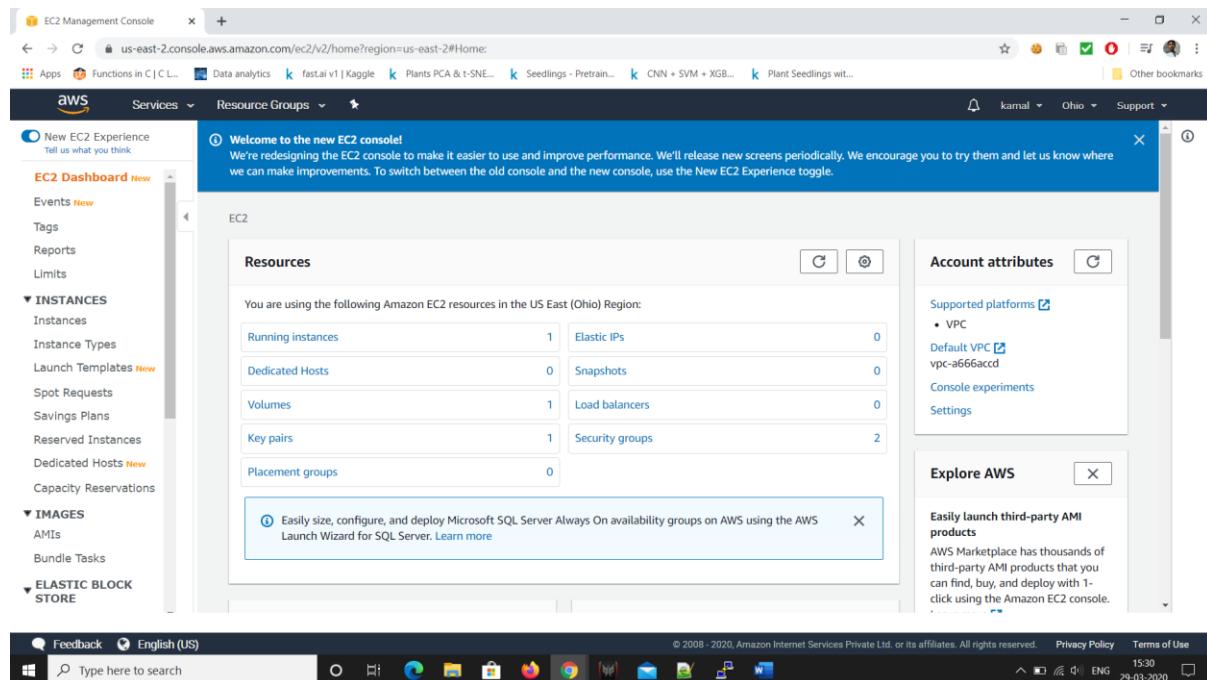
# AWS

## Screenshots of Dashboards:

### 1. AWS Login Screen with Username:



### 2. EC2 Dashboard:



### 3. S3 Dashboard:

The screenshot shows the AWS S3 Management Console. On the left, there's a sidebar with options like 'Buckets', 'Batch operations', 'Access analyzer for S3', 'Block public access (account settings)', and a 'Feature spotlight' section. The main area is titled 'Amazon S3' and shows a table of buckets. The table has columns for 'Name', 'Region', 'Access', and 'Bucket created'. There is one entry: 'kamal-demo' (Region: US East (N. Virginia), Access: Private, Bucket created: 2020-03-27T14:28:11.000Z). At the top, there's a message: 'Were gradually updating the design of the Amazon S3 console. You will notice some updated screens as we improve the performance and user interface. To help us improve the experience, give feedback on the recent updates.' The bottom of the screen shows the Windows taskbar with various pinned icons.

### 4. Reckognition Dashboard:

The screenshot shows the AWS Rekognition Dashboard. On the left, there's a sidebar with sections like 'Custom Labels', 'Demos', 'Image moderation', 'Facial analysis', 'Celebrity recognition', 'Face comparison', 'Text in image', 'Video Demos', 'Metrics', and 'Additional Resources'. The main area is titled 'Amazon Rekognition' and describes it as a 'Deep learning-based visual analysis service' that 'Searches, verifies, and organizes millions of images and videos'. It features a 'Try Demo' button and 'Download SDKs'. Below this, there are three sections: 'Easily Integrate Powerful Visual Analysis Into Your App', 'Continuously Learning', and 'Integrated with AWS Services'. Each section has a brief description and an associated icon. The bottom of the screen shows the Windows taskbar with various pinned icons.

# Screenshots of EC2:

Create an AWS account and go to EC2 service

Click on launch instance

## 1. Choosing an AMI

And select a operating system with a ram

Step 1: Choose an Amazon Machine Image (AMI)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

Quick Start

My AMIs

AWS Marketplace

Community AMIs

Free tier only

Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-0e01ce4ee18447327 (64-bit x86) / ami-03201f374ab66a26e (64-bit Arm)

Amazon Linux 2 comes with five years support. It provides Linux kernel 4.14 tuned for optimal performance on Amazon EC2, systemd 219, GCC 7.3, Glibc 2.26, Binutils 2.29.1, and the latest software packages through extras.

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Select

64-bit (x86)  
64-bit (Arm)

Amazon Linux AMI 2018.03.0 (HVM), SSD Volume Type - ami-01b01bbd08f24c7a8

The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Select

64-bit (x86)

Red Hat Enterprise Linux 8 (HVM), SSD Volume Type - ami-0520e698dd500b1d1 (64-bit x86) / ami-0099847d600887c9f (64-bit Arm)

Select

Feedback English (US)

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

home.html

Type here to search

1650 29-03-2020

## 2. Choosing an Instance Type

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.

Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
General purpose	t2.micro	1	1	EBS only	-	Low to Moderate	Yes
General purpose	t2.small	1	2	EBS only	-	Low to Moderate	Yes
General purpose	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
General purpose	t2.large	2	8	EBS only	-	Low to Moderate	Yes
General purpose	t2.xlarge	4	16	EBS only	-	Moderate	Yes
General purpose	t2.2xlarge	8	32	EBS only	-	Moderate	Yes

Cancel Previous Review and Launch Next: Configure Instance Details

Feedback English (US)

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

Type here to search

1650 29-03-2020

**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

Purchasing option: Request Spot Instances

Network: vpc-a66aacc (default)

Subnet: No preference (default subnet in any Availability Zone)

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

Placement group: Add instance to placement group

Capacity Reservation: Open

IAM role: None

Shutdown behavior: Stop

Stop - Hibernate behavior: Enable hibernation as an additional stop behavior

Enable termination protection: Protect against accidental termination

Monitoring: Enable CloudWatch detailed monitoring

### 3. Adding Storage

Next add storage as your own I selected as 8

**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/xvda	snap-0f54692056aaa4c20	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

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.

**Add Tags**

Name	Value

## 4. Configuring Security Group

Check the type is SSH and port number is 22

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:

Description:

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	Custom 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

Step 7: Review Instance Launch

Please review your instance launch details. You can go back to edit changes for each section. Click Launch to assign a key pair to your instance and complete the launch process.

AMI Details

Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-0e01ce4ee18447327

Free tier eligible

Amazon Linux 2 comes with five years support. It provides Linux kernel 4.14 tuned for optimal performance on Amazon EC2, systemd 219, GCC 7.3, Glibc 2.26, Binutils 2.29.1, and the latest software packages through extras.

Root Device Type: ebs Virtualization type: hvm

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

Security group name: launch-wizard-2  
Description: launch-wizard-2 created 2020-03-29T16:50:57.044+05:30

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop

Cancel Previous Launch

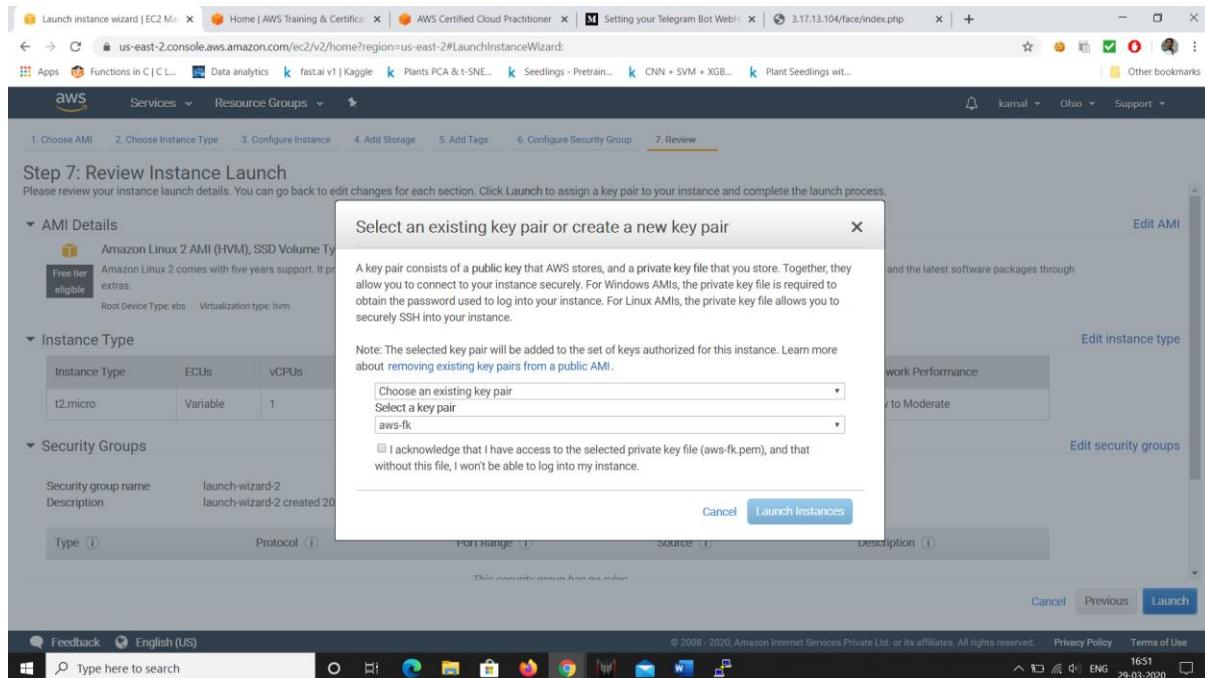
Click on REVIEW and LAUNCH

Review the all the things you entered and click on Launch.

We get a pop up window and choose a create a new key pair

And write the key pair name as your own.

## 5. Key Pair Download



And launch and download a keypair.

After launch click on the link it start your instance.

It is In a format of .pem

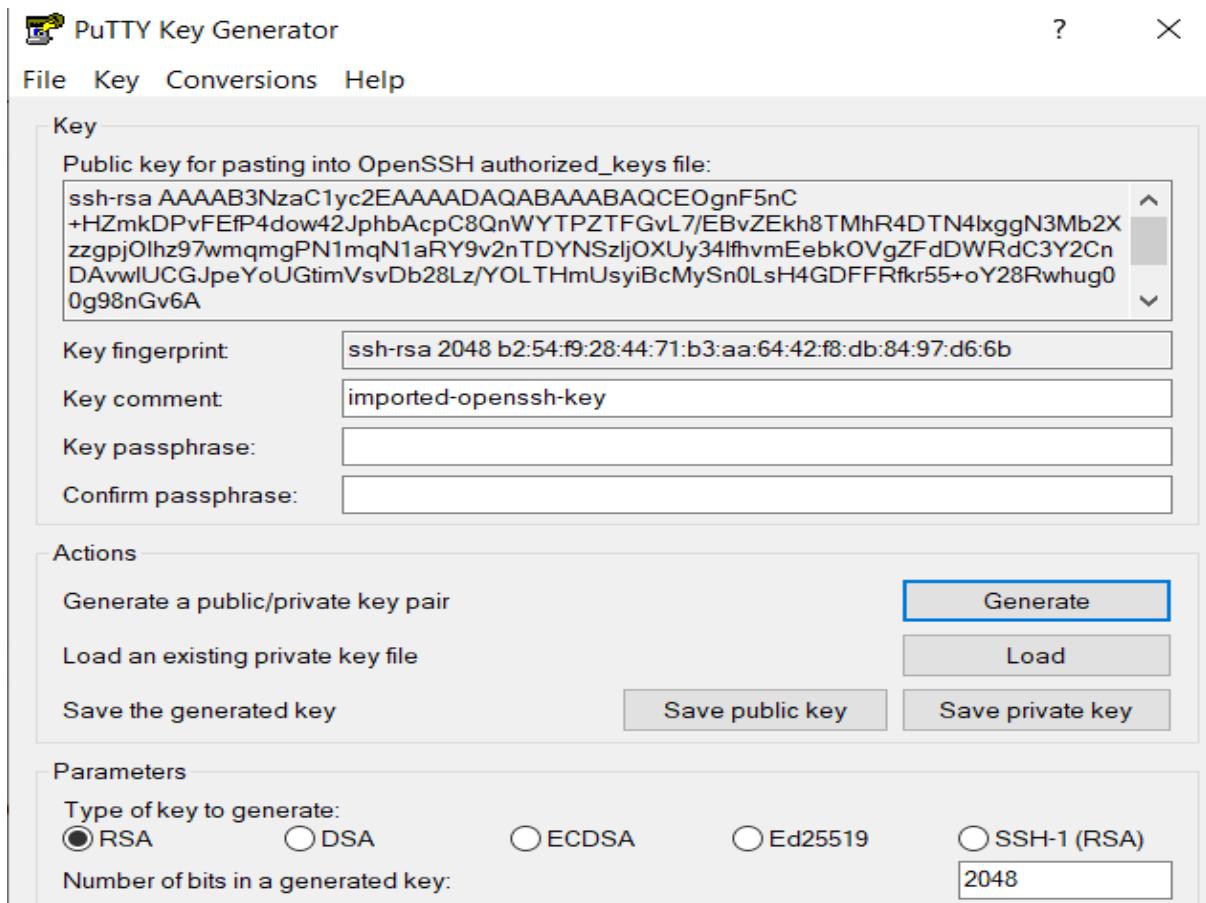
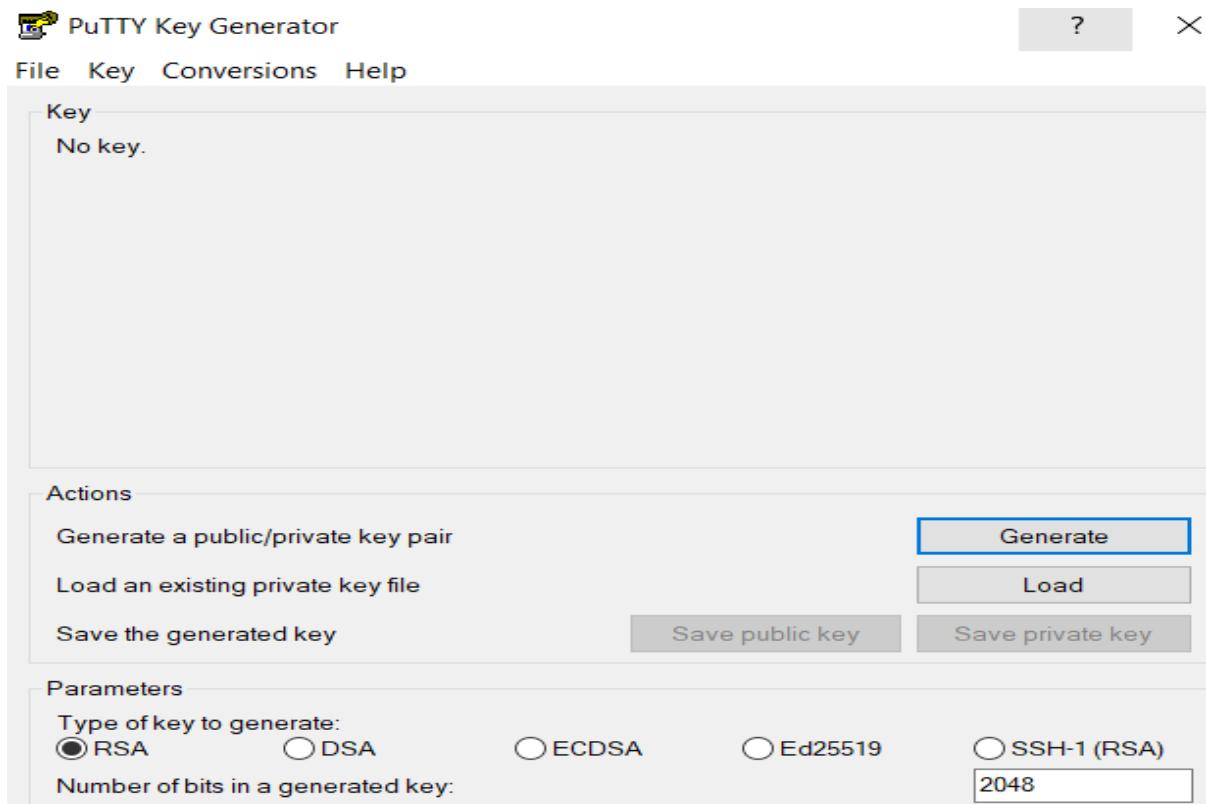
getting connected

## 6. PuTTYgen conversion from pem to ppk

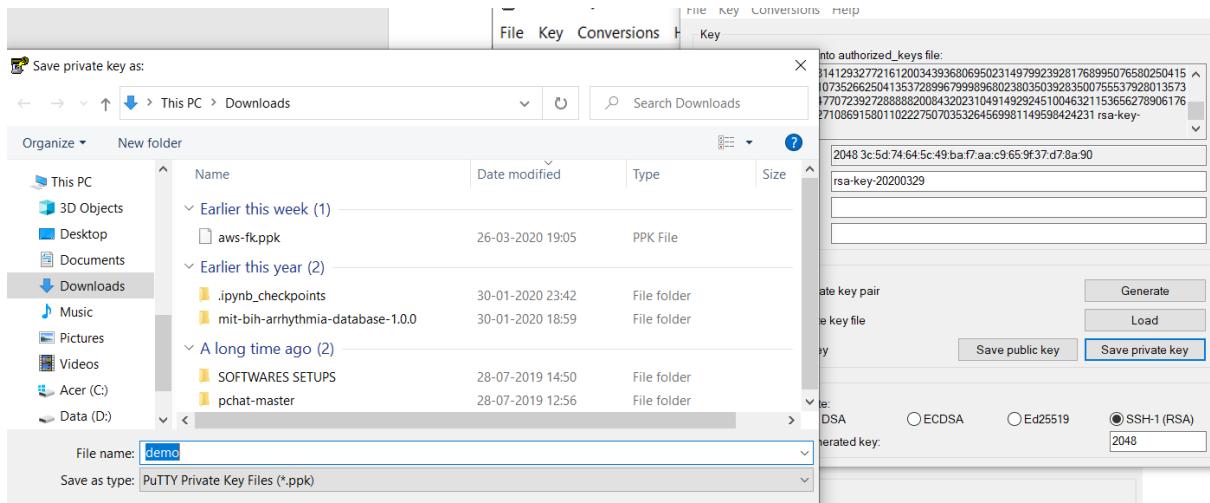
Convert pem to ppk -puttygen (or) command we can do

command lie -> pttgen KETFILE.pem -o KEYFILE.ppk

it will convert the .pem to .ppk

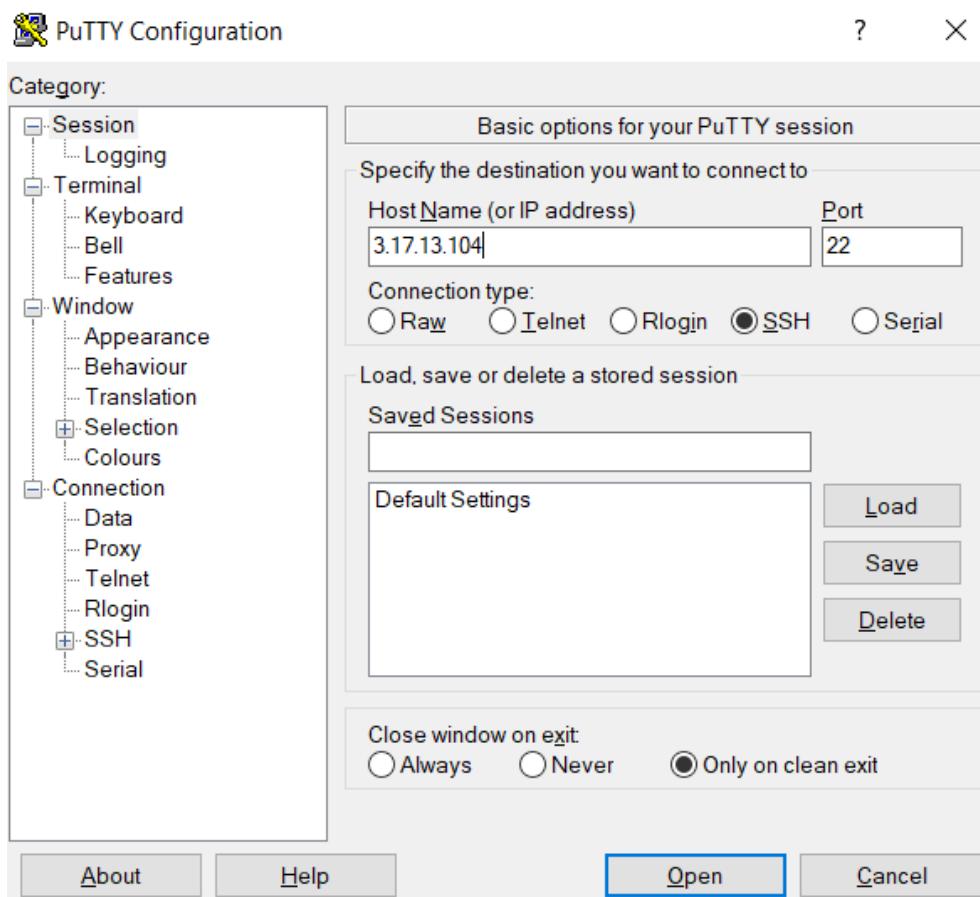


Press on save private key

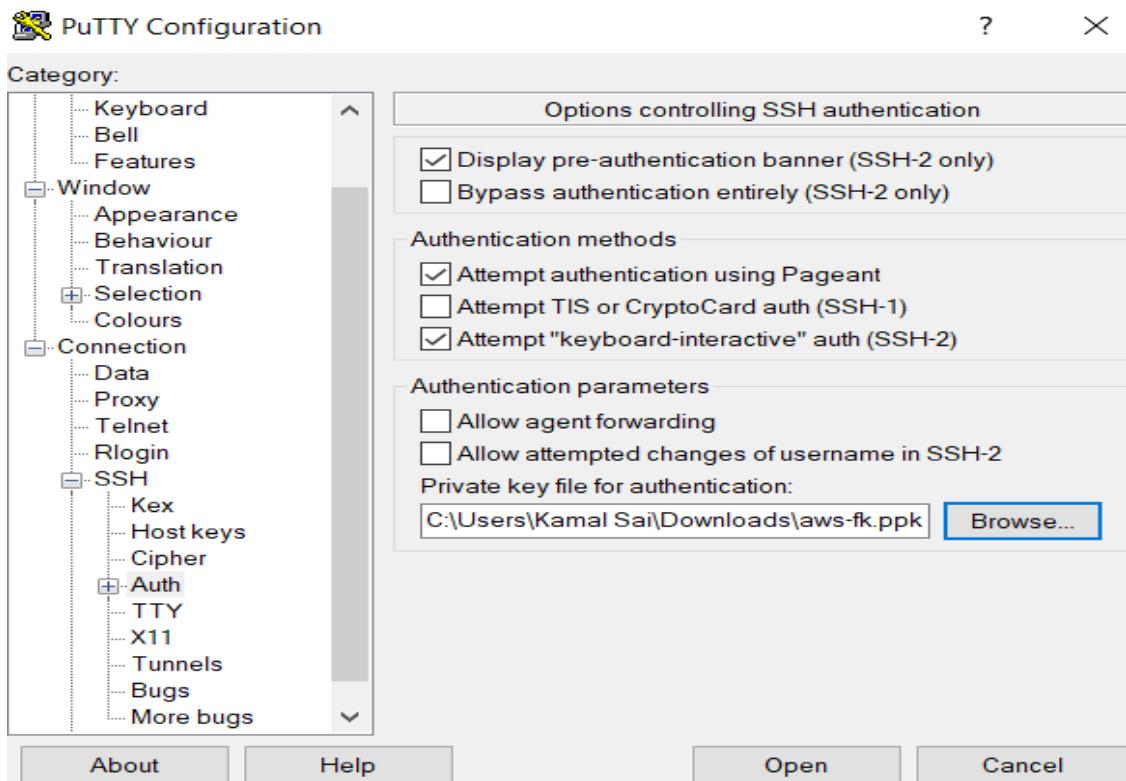


download putty from online

and open putty enter your ip address in AWS and select SSH and port number as 22



go to connection In left side of the putty expand that and expand SSH click on Auth and browse a keypair of format .ppk



And open

## 7. Logged in EC2 black screen

Login as ec2-user

The screenshot shows a Windows terminal window titled 'ec2-user@ip-172-31-30-252~'. The session output is as follows:

```
ec2-user@ip-172-31-30-252~$ login as: ec2-user
[ec2-user@ip-172-31-30-252 ~]$ Authenticating with public key "imported-openssh-key"
Last login: Sun Mar 29 10:40:52 2020 from 14.192.2.216
[ec2-user@ip-172-31-30-252 ~]$ Amazon Linux 2 AMI
[ec2-user@ip-172-31-30-252 ~]$ https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-30-252 ~]$
```

The taskbar at the bottom shows the Start button, a search bar, and several pinned icons. The system tray indicates the date as 31-03-2020 and the time as 14:54.

```
[ec2-user@ip-172-31-30-252 ~]$ sudo yum install httpd
```

```
[ec2-user@ip-172-31-30-252 ~]$ sudo service httpd start
Redirecting to /bin/systemctl start httpd.service
```

```
[ec2-user@ip-172-31-30-252 ~]$ sudo service httpd status
Redirecting to /bin/systemctl status httpd.service
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; vendor prese
t: disabled)
   Active: active (running) since Thu 2020-03-26 13:42:28 UTC; 29s ago
     Docs: man:httpd.service(8)
   Main PID: 3680 (httpd)
      Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes se
rved/sec: 0 B/sec"
      CGroup: /system.slice/httpd.service
              └─3680 /usr/sbin/httpd -DFOREGROUND
                  ├─3681 /usr/sbin/httpd -DFOREGROUND
                  ├─3682 /usr/sbin/httpd -DFOREGROUND
                  ├─3683 /usr/sbin/httpd -DFOREGROUND
                  ├─3684 /usr/sbin/httpd -DFOREGROUND
                  ├─3685 /usr/sbin/httpd -DFOREGROUND

Mar 26 13:42:28 ip-172-31-30-252.us-east-2.compute.internal systemd[1]: Start...
Mar 26 13:42:28 ip-172-31-30-252.us-east-2.compute.internal systemd[1]: Start...
Hint: Some lines were ellipsized, use -l to show in full.
[ec2-user@ip-172-31-30-252 ~]$ sudo vim /var/www/html/index.html
[ec2-user@ip-172-31-30-252 ~]$
```

Press i we get into

And we can write what ever we want

```
Hi friends. From kamalsai
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
-- INSERT --          1, 3          All
```

ESC :wq (hit an enter)

We get back to back normal console

Open browser and enter your ip address of your which is present in aws

The screenshot shows the AWS Management Console with the EC2 Instances page open. A single instance, i-09f75f808b22a25ae, is listed. The instance is running in the us-east-2b availability zone. Key details shown include:

	Value
Public DNS (IPv4)	ec2-3-17-13-104.us-east-2.compute.amazonaws.com
Instance ID	i-09f75f808b22a25ae
Instance state	running
Instance type	t2.micro
Private DNS	ip-172-31-30-252.us-east-2.compute.internal
Private IPs	172.31.30.252
Secondary private IPs	-
VPC ID	vpc-a666accd
Subnet ID	subnet-622c0718
Network interfaces	eth0
Availability zone	us-east-2b
Security groups	launch-wizard-1, view inbound rules, view outbound rules
Scheduled events	No scheduled events
AMI ID	amzn2-ami-hvm-2.0.20200304.0-x86_64-gp2 (ami-0e01ce4ee18447327)
Platform details	-
Usage operation	-

If it not show then go to aws and in Security group click on [launch-wizard-1](#)

The screenshot shows the AWS Management Console with the Security Groups page open. Two security groups are listed:

Security group ID	Security group name	VPC ID	Description	Owner	Inbound
sg-075169993a8375ed9	launch-wizard-1	vpc-a666accd	launch-wizard-1 create...	748938868313	3 Permis
sg-e2d0379b	default	vpc-a666accd	default VPC security gr...	748938868313	1 Permis

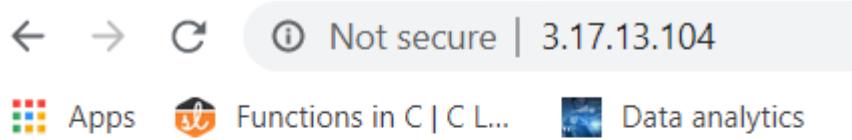
Click on security group id and edit inbound rules and add rule and set it to http and make source to anywhere and save rule.

Inbound rules

Type	Protocol	Port range	Source	Description - optional
HTTP	TCP	80	Custom	0.0.0.0/0
HTTP	TCP	80	Custom	::/0
SSH	TCP	22	Custom	0.0.0.0/0

Add rule

Now open browser and search your ip address it will show what you typed message before.



Hi to all friends. From kamalsai

# Screenshots of S3:

## 1. Creating a bucket

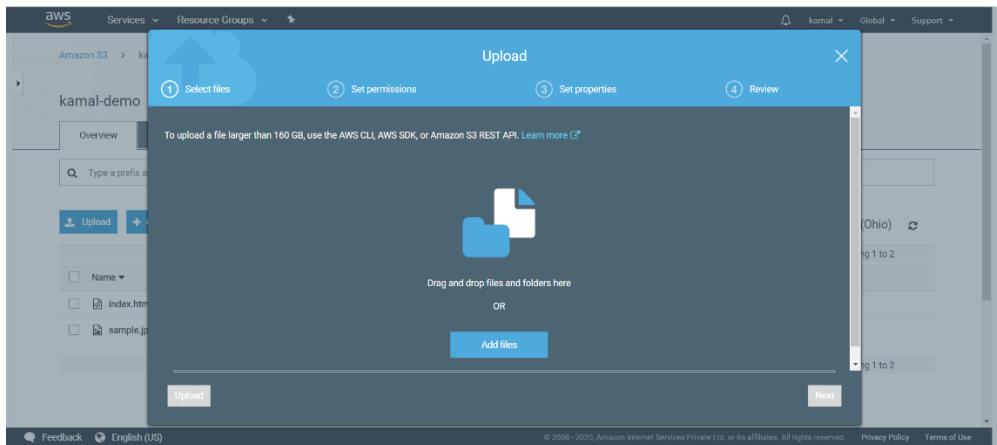
The screenshot shows the 'Create bucket' page in the AWS Management Console. The 'General configuration' section is visible, showing a bucket name 'demo-345' and a region 'US East (Ohio) us-east-2'. Below this, the 'Bucket settings for Block Public Access' section is shown, with the 'Block all public access' checkbox selected. A note explains that this setting applies to the bucket and its objects. The page includes standard AWS navigation and status information at the bottom.

The screenshot shows the 'kamal-demo' bucket page. It displays three main sections: 'Upload an object' (with a bucket icon), 'Set object properties' (with a user icon), and 'Set object permissions' (with a database icon). Below these are descriptive text blocks and 'Learn more' links. The top navigation bar shows the bucket name and region.

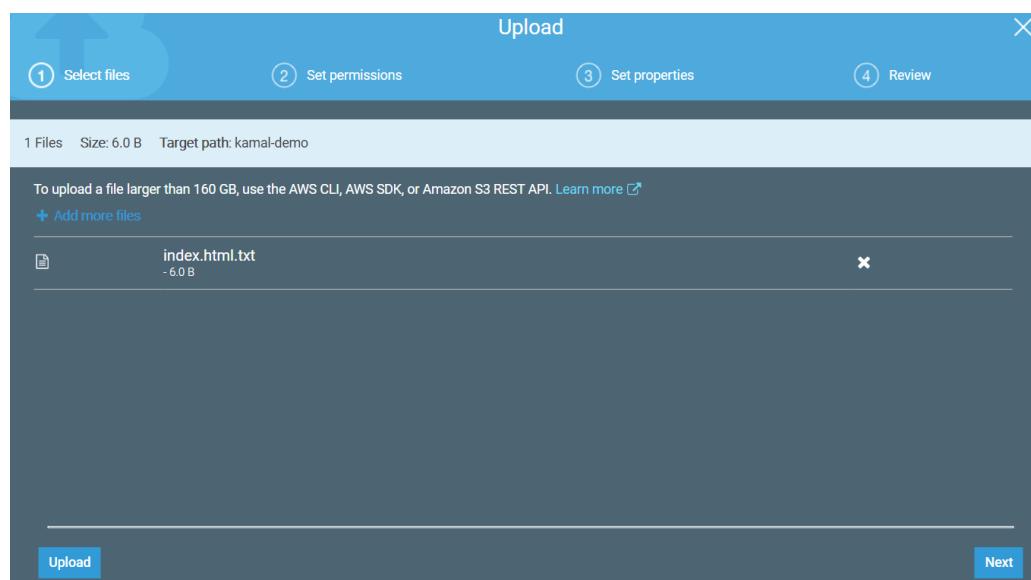
## 2. Uploading an Object

The screenshot shows the 'kamal-demo' bucket page with two objects listed: 'index.html' and 'sample.jpg'. Both files are in the 'Standard' storage class. The top navigation bar shows the bucket name and region.

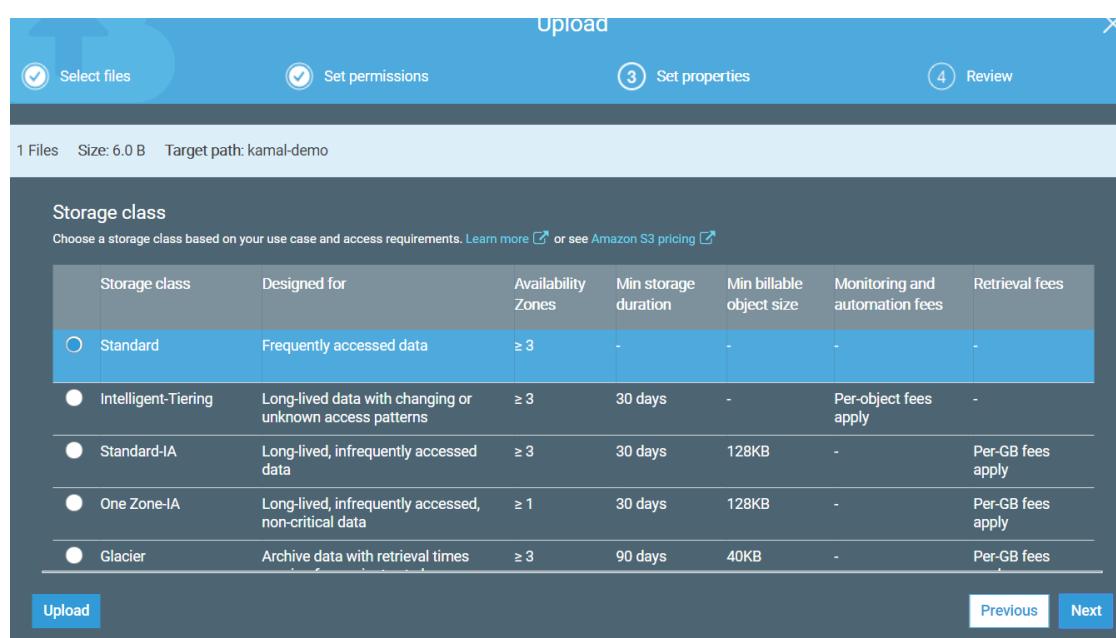
Name	Last modified	Size	Storage class
index.html	Mar 27, 2020 8:14:40 PM GMT+0530	23.0 B	Standard
sample.jpg	Mar 29, 2020 4:47:42 PM GMT+0530	210.5 KB	Standard



## Upload a file



Click on next And make sure that it should be on standard



Click next and click upload not change anything

The uploaded file looks like

Name	Last modified	Size	Storage class
index.html	Mar 27, 2020 8:14:40 PM GMT+0530	23.0 B	Standard
sample.jpg	Mar 29, 2020 4:47:42 PM GMT+0530	210.5 KB	Standard

Owner  
70185e61143725498033ad3ad3cbaf013c3b85e6533a1ddcf4351fb6324986a1

Last modified  
Mar 27, 2020 8:14:40 PM GMT+0530

Etag  
247686a0c046cd1486c1eb2043e6ec82

Storage class  
Standard

Server-side encryption  
None

Size  
23.0 B

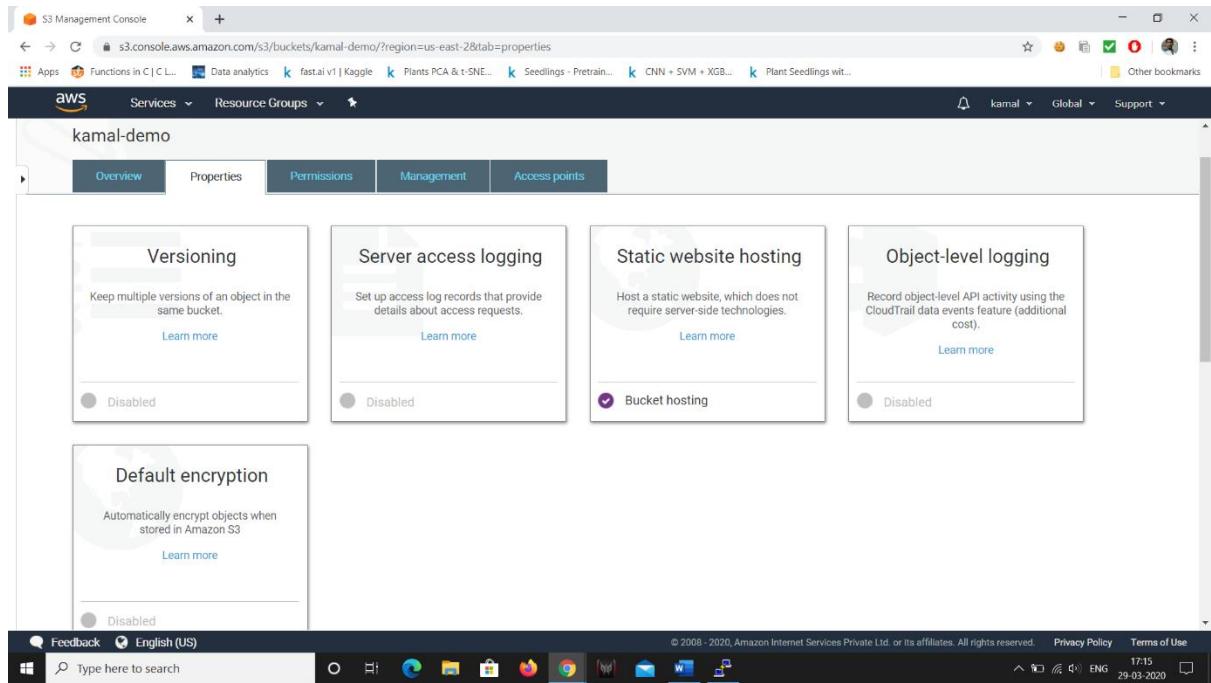
Key  
index.html

Object URL  
<https://kamal-demo.s3.us-east-2.amazonaws.com/index.html>

Press make public.

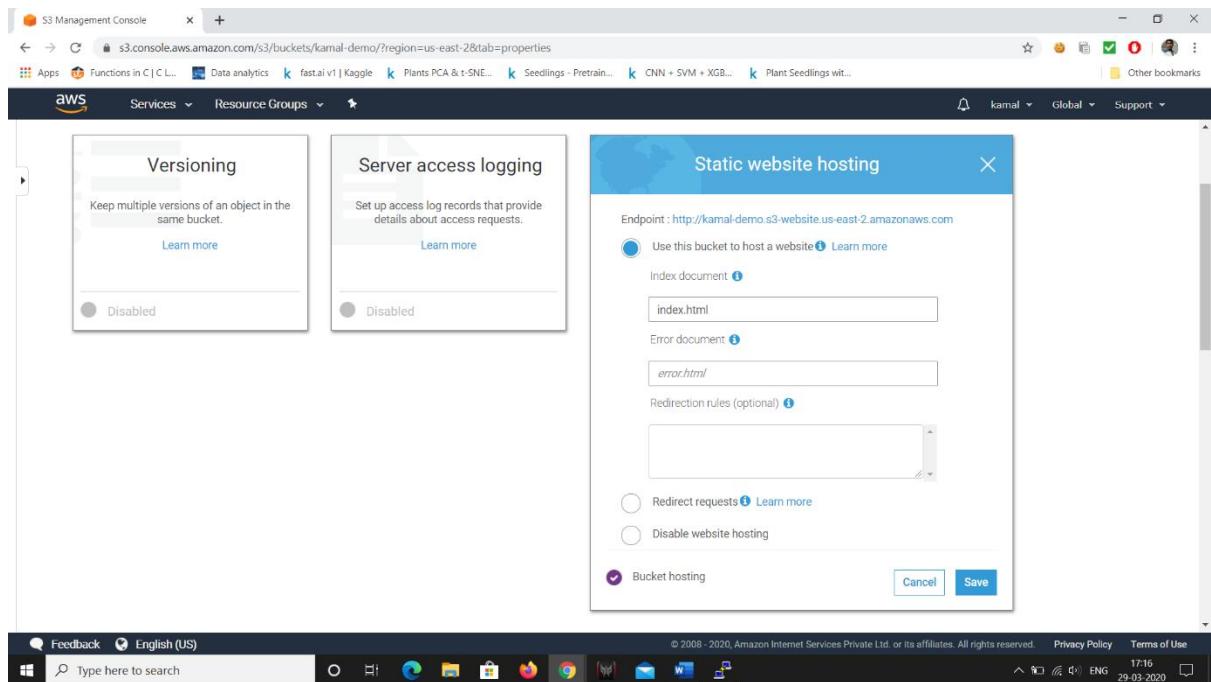
### 3. Enabling Static Website

Go to properties



Click on Static website

And go to bucket to host a website and save



## 4. Making the Object Public

Go to permissions and click on edit

Off the block all public access

The screenshot shows the AWS S3 Management Console with the URL <https://s3.console.aws.amazon.com/s3/buckets/kamal-demo?region=us-east-2&tab=permissions>. The 'Block public access' tab is selected. The configuration shows 'Block all public access' set to 'Off'. Under this setting, four options are listed: 'Block public access to buckets and objects granted through new access control lists (ACLs)' (Off), 'Block public access to buckets and objects granted through any access control lists (ACLs)' (Off), 'Block public access to buckets and objects granted through new public bucket or access point policies' (Off), and 'Block public and cross-account access to buckets and objects through any public bucket or access point policies' (Off). An 'Edit' button is visible at the top right of the configuration area.

Go to overview and click on object and click on make public

## 5. Checking the S3 link on the browser

The screenshot shows the AWS S3 Management Console with the URL <https://s3.console.aws.amazon.com/s3/object/kamal-demo/index.html?region=us-east-2&tab=overview>. The 'Properties' tab is selected. The object details are as follows:

- Owner: 70185e61143725498033ad3ad3cbaf013c3b85e6533a1ddcf4351fb6324986a1
- Last modified: Mar 27, 2020 8:14:40 PM GMT+0530
- Etag: 247686a0c046cd1480c1eb2043e6ec82
- Storage class: Standard
- Server-side encryption: None
- Size: 23.0 B
- Key: index.html
- Object URL: <https://kamal-demo.s3.us-east-2.amazonaws.com/index.html>

And click on URL at bottom it show the what is there in file.

Or go to properties click on website hosting there you find a endpoint

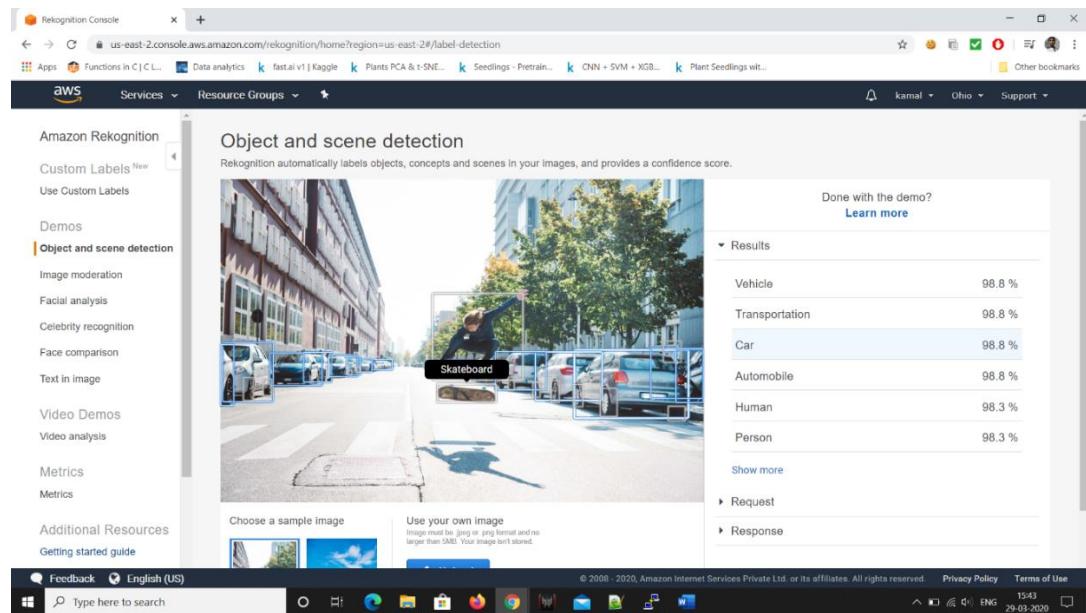
← → ⌂ kamal-demo.s3.us-east-2.amazonaws.com/index.html

Apps Functions in C | C L... Data analytics fast.ai v1 | Kaggle Plants PCA & t-SNE...

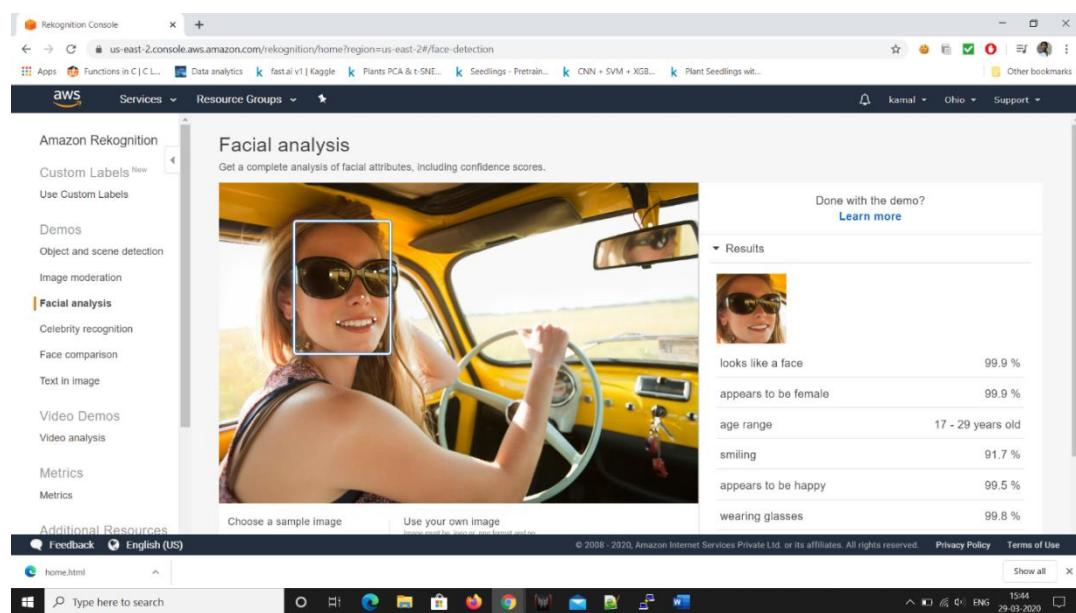
hi all

# Screenshots of Rekognition:

## 1. Object and Scene detection



## 2. Face Detect



### 3. Celebrity Recognition

The screenshot shows the AWS Rekognition console interface. On the left, a sidebar lists various services like Custom Labels, Demos, and Face comparison. The main area is titled "Celebrity recognition" and displays a portrait of Jeff Bezos with a bounding box around his face. Below the image are two input fields: "Choose a sample image" and "Use your own image". To the right, a "Results" section shows a thumbnail of Jeff Bezos with the text "Jeff Bezos Learn More" and a "Match confidence" of 100%. There are also sections for "Request" and "Response". The browser address bar shows the URL: <https://us-east-2.console.aws.amazon.com/rekognition/home?region=us-east-2#/celebrity-detection>.

### 4. Face Compare

The screenshot shows the AWS Rekognition console interface. The sidebar includes options like Custom Labels, Demos, and Face comparison. The main area is titled "Face comparison" and features two images: a "Reference face" of a girl with a headband and a "Comparison faces" image of three girls. Below these are two input fields: "Choose a sample image" and "Choose a sample image". To the right, a "Results" section displays two pairs of faces with a comparison symbol between them and a "Similarity" bar at 99.8%. The browser address bar shows the URL: <https://us-east-2.console.aws.amazon.com/rekognition/home?region=us-east-2#/face-comparison>.

## 5. Text in Image

The screenshot shows the AWS Rekognition Console interface. On the left, a sidebar lists various services like Custom Labels, Demos, and Metrics, with 'Text in image' selected. The main content area displays a demo image of a red mug with a smiley face, overlaid with text: 'IT'S MONDAY but keep Smiling'. Below the image are two buttons: 'Choose a sample image' and 'Use your own image'. To the right, a results panel shows the detected text: 'IT'S', 'MONDAY', 'but', 'keep', and 'Smiling'. There are also sections for 'Request' and 'Response'. At the bottom, the Windows taskbar is visible.

## IAM:

**Success**  
You successfully created the users shown below. You can view and download user security credentials. You can also email users instructions for signing in to the AWS Management Console. This is the last time these credentials will be available to download. However, you can create new credentials at any time.

Users with AWS Management Console access can sign-in at: <https://748938868313.signin.aws.amazon.com/console>

[Download .csv](#)

	User	Access key ID	Secret access key	Password	Email login instructions
▶	<input checked="" type="checkbox"/> kamal	AKIA24YB4GZMZIS6FI5C	/lwzKNy8DLTvdlA6LAD7jt8a GUjERehDYNQwc9l	<a href="#">Hide</a>	<a href="#">Send email ↗</a>

## Create a IAM role

**Create role**

**Select type of trusted entity**

AWS service EC2, Lambda and others    Another AWS account Belonging to you or 3rd party    Web identity Cognito or any OpenID provider    SAML 2.0 federation Your corporate directory

Allows AWS services to perform actions on your behalf. [Learn more](#)

**Choose a use case**

Common use cases

**EC2**  
Allows EC2 instances to call AWS services on your behalf.

**Lambda**  
Allows Lambda functions to call AWS services on your behalf.

Or select a service to view its use cases

API Gateway	CodeDeploy	EMR	KMS	RoboMaker
AWS Backup	CodeGuru	ElastiCache	Kinesis	S3
AWS Chatbot	CodeStar Notifications	Elastic Beanstalk	Lambda	SMS
AWS Support	Comprehend	Elastic Container Service	Lex	SNS

\* Required   [Cancel](#)   [Next: Permissions ↗](#)

**Create role**

**Attach permissions policies**

Choose one or more policies to attach to your new role.

Filter policies  Showing 4 results

Policy name	Used as
AmazonDMSRedshiftS3Role	None
<input checked="" type="checkbox"/> AmazonS3FullAccess	Permissions policy (1)
AmazonS3ReadOnlyAccess	None
QuickSightAccessForS3StorageManagementAnalyticsReadOnly	None

\* Set permissions boundary   [Previous](#)   [Next: Tags ↗](#)

Screenshot of the AWS IAM Management Console showing the "Create role" wizard, step 2: "Attach permissions policies".

The "Attach permissions policies" section shows a list of available policies:

Policy name	Used as
AmazonRekognitionCustomLabelsFullAccess	None
AmazonRekognitionFullAccess	Permissions policy (1)
AmazonRekognitionReadOnlyAccess	None
AmazonRekognitionServiceRole	None

Below the table, there is a "Set permissions boundary" section with a note: "\* Required".

At the bottom right of the screen, a Windows taskbar is visible.

## Ignore tags and

Screenshot of the AWS IAM Management Console showing the "Create role" wizard, step 3: "Review".

The "Review" section displays the following information:

- Role name:** S3\_admin\_acces
- Role description:** Allows EC2 instances to call AWS services on your behalf.
- Trusted entities:** AWS service: ec2.amazonaws.com
- Policies:** AmazonS3FullAccess, AmazonRekognitionFullAccess
- Permissions boundary:** Permissions boundary is not set
- No tags were added.**

At the bottom right of the screen, a Windows taskbar is visible.

## Create role .

## Go to EC2 and running instance and attach/Replace IAM Role

The screenshot shows the AWS EC2 Management Console. On the left, there's a sidebar with navigation links like 'Instances', 'Events', 'Tags', etc. The main area shows a table of instances. A context menu is open over an instance named 'i-09f75f808b22a25ae'. The menu items include 'Connect', 'Create Template From Instance', 'Launch More Like This', 'Instance State' (which is 'running'), 'Instance Settings' (selected), 'Image', 'Networking', 'CloudWatch Monitoring', 'Add/Edit Tags', 'Attach to Auto Scaling Group', 'Attach/Replace IAM Role' (which is highlighted in blue), 'Change Instance Type', 'Change Termination Protection', 'View/Change User Data', 'Change Shutdown Behavior', 'Change T2/T3 Unlimited', 'Get System Log', 'Get Instance Screenshot', 'Modify Instance Placement', and 'Modify Capacity Reservation Settings'. Below the table, there's detailed information about the instance, including its Public DNS, Private DNS, VPC ID, Subnet ID, Network interfaces, and IAM role.

Select the role and press apply

The screenshot shows the 'Attach/Replace IAM Role' dialog box. At the top, it says 'Attach/Replace IAM Role'. Below that, it says 'Select an IAM role to attach to your instance. If you don't have any IAM roles, choose Create new IAM role to create a role in the IAM console. If an IAM role is already attached to your instance, the IAM role you choose will replace the existing role.' There is an 'Instance ID' field with 'i-09f75f808b22a25ae'. A dropdown menu labeled 'IAM role\*' shows 'S3\_admin\_access' selected. A search bar below it says 'Filter by attributes' and has 'Profile Name' and 'No Role' listed. At the bottom right of the dialog are 'Cancel' and 'Apply' buttons. The background shows the same EC2 management console interface as the previous screenshot.

# Screenshots needed for EC2 & S3:

## 1. Installing aws-sdk

```
sudo php -d memory_limit=-1 ~/composer.phar require aws/aws-sdk-php
```

```
[ec2-user@ip-172-31-30-252 html]$ cd face
[ec2-user@ip-172-31-30-252 face]$ sudo php -d memory_limit=-1 ~/composer.phar require aws/aws-sdk-php
Using version ^2.8 for aws/aws-sdk-php
./composer.json has been updated
Loading composer repositories with package information
Updating dependencies (including require-dev)
Nothing to install or update
Package guzzle/guzzle is abandoned, you should avoid using it. Use guzzlehttp/guzzle instead.
Generating autoload files
```

## 2. Installing php

```
sudo yum install php
```

```
[ec2-user@ip-172-31-30-252 ~]$ sudo yum install php
Loaded plugins: extras suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
--> Package php.x86_64 0:7.2.28-1.amzn2 will be installed
--> Processing Dependency: php-common(x86-64) = 7.2.28-1.amzn2 for package: php-7.2.28-1.amzn2.x86_64
--> Processing Dependency: php-cli(x86-64) = 7.2.28-1.amzn2 for package: php-7.2.28-1.amzn2.x86_64
--> Running transaction check
--> Package php-cli.x86_64 0:7.2.28-1.amzn2 will be installed
--> Package php-common.x86_64 0:7.2.28-1.amzn2 will be installed
--> Processing Dependency: php-json(x86-64) = 7.2.28-1.amzn2 for package: php-common-7.2.28-1.amzn2.x86_64
--> Running transaction check
--> Package php-json.x86_64 0:7.2.28-1.amzn2 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
| Package           | Arch   | Version          | Repository | Size
|-----|-----|-----|-----|-----|
| Installing:      |        |                 |            |       |
| php               | x86_64 | 7.2.28-1.amzn2 | amzn2extra-php7.2 | 2.9 M
| Installing for dependencies: |        |                 |            |       |
| php-cli           | x86_64 | 7.2.28-1.amzn2 | amzn2extra-php7.2 | 4.4 M
| php-common        | x86_64 | 7.2.28-1.amzn2 | amzn2extra-php7.2 | 1.1 M
| php-json          | x86_64 | 7.2.28-1.amzn2 | amzn2extra-php7.2 | 71 K
|-----|-----|-----|-----|-----|
Transaction Summary
Install 1 Package (+3 Dependent packages)

Total download size: 8.4 M
Installed size: 34 M
Is this ok [y/d/N]: y
Downloading packages:
(1/4): php-cli-7.2.28-1.amzn2.x86_64.rpm | 4.4 MB 00:00:00
(2/4): php-common-7.2.28-1.amzn2.x86_64.rpm | 1.1 MB 00:00:00
(3/4): php-common-7.2.28-1.amzn2.x86_64.rpm | 71 KB 00:00:00
(4/4): php-7.2.28-1.amzn2.x86_64.rpm | 2.9 MB 00:00:00
Total
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : php-common-7.2.28-1.amzn2.x86_64
  Installing : php-xml-7.2.28-1.amzn2.x86_64
  Installing : php-cli-7.2.28-1.amzn2.x86_64
  Installing : php-7.2.28-1.amzn2.x86_64
  Verifying  : php-cli-7.2.28-1.amzn2.x86_64
=====
| 4.4 MB 00:00:00
| 1.1 MB 00:00:00
| 71 KB 00:00:00
| 2.9 MB 00:00:00
|-----|-----|-----|-----|
34 MB/s | 8.4 MB 00:00:00
=====
Type here to search
O 1456
ENG 31-03-2020
```

## 3. index.php file code

```
<?php
```

```
/*
```

```
Install php - sudo yum install php
curl -sS https://getcomposer.org/installer | php
cd /var/www/html
```

```
sudo mkdir face
cd face
sudo php -d memory_limit=-1 ~/composer.phar require aws/aws-sdk-
php
```

In case if you get memory error -

```
sudo /bin/dd if=/dev/zero of=/var/swap.1 bs=1M count=1024
sudo /sbin/mkswap /var/swap.1
sudo /sbin/swapon /var/swap.1
```

```
sudo wget
https://i.pinimg.com/originals/b9/7e/a3/b97ea33b5842c7894b804923c
6c05580.jpg
sudo mv b97ea33b5842c7894b804923c6c05580.jpg sample.jpg
```

Incase if you are getting any class NOT found error, follow these steps

```
sudo yum remove php*
sudo yum remove httpd*
sudo yum clean all
sudo yum upgrade -y
sudo amazon-linux-extras install php7.2
sudo yum install php-json php-xml php-cli php-mbstring
sudo yum install httpd
```

```
*/
// error_reporting(0);

require_once(__DIR__ . '/vendor/autoload.php');

use Aws\S3\S3Client;
use Aws\Rekognition\RekognitionClient;
```

```
$bucket = 'kamal-demo';
$keyname = 'sample.jpg';
```

```

$S3 = new S3Client([
    'region'      => 'us-east-2',
    'version'     => '2006-03-01',
    'signature'   => 'v4'
]);

try {
    // Upload data.
    $result = $S3->putObject([
        'Bucket'          => $bucket,
        'Key'             => $keyname,
        'SourceFile'      => __DIR__. "/{$keyname}",
        'ACL'             => 'public-read-write'
    ]);

    // Print the URL to the object.
    $imageUrl = $result['ObjectURL'];
    if($imageUrl) {
        echo "Image upload done... Here is the URL: " . $imageUrl;

        $rekognition = new RekognitionClient([
            'region'      => 'us-east-2',
            'version'     => 'latest',
        ]);

        $result = $rekognition->detectFaces([
            'Attributes'  => ['DEFAULT'],
            'Image'       => [
                'S3Object' => [
                    'Bucket' => $bucket,
                    'Name'   => $keyname,
                    'Key'    => $keyname,
                ],
            ],
        ]);
    }
}

```

```

        echo "Totally there are " . count($result["FaceDetails"]) . "
faces";
    }
} catch (Exception $e) {
    echo $e->getMessage() . PHP_EOL;
}

```

## 4. Upload success screenshot

```

Composer (version 1.10.1) successfully installed to: /home/ec2-user/composer.phar
Use it: php composer.phar

[ec2-user@ip-172-31-30-252 ~]$ cd /var/www/html
[ec2-user@ip-172-31-30-252 html]$ sudo mkdir face
mkdir: cannot create directory 'face': File exists
[ec2-user@ip-172-31-30-252 html]$ cd face
[ec2-user@ip-172-31-30-252 face]$ sudo php -d memory_limit=-1 ~/composer.phar require aws/aws-sdk-php
Using version ^2.8 for aws/aws-sdk-php
./composer.json has been updated
Loading composer repositories with package information
Updating dependencies (including require-dev)
Nothing to install or update
Package guzzle/guzzle is abandoned, you should avoid using it. Use guzzlehttp/guzzle instead.
Generating autoload files
[ec2-user@ip-172-31-30-252 face]$ sudo wget https://i.pinimg.com/originals/b9/7e/a3/b97ea33b5842c7894b804923c6c05580.jpg
--2020-03-29 09:46:10-- https://i.pinimg.com/originals/b9/7e/a3/b97ea33b5842c7894b804923c6c05580.jpg
Resolving i.pinimg.com (i.pinimg.com)... 104.18.14.176, 104.18.15.176, 2600:1408:20:aa5::1931, ...
Connecting to i.pinimg.com (i.pinimg.com)|104.18.14.176|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 215551 (210K) [image/jpeg]
Saving to: 'b97ea33b5842c7894b804923c6c05580.jpg'

100%[=====] 215,551 --.-K/s in 0.03s

2020-03-29 09:46:11 (6.15 MB/s) - 'b97ea33b5842c7894b804923c6c05580.jpg' saved [215551/215551]

[ec2-user@ip-172-31-30-252 face]$ sudo mv b97ea33b5842c7894b804923c6c05580.jpg sample.jpg
[ec2-user@ip-172-31-30-252 face]$ ls
composer.json composer.lock index.php sample.jpg vendor
[ec2-user@ip-172-31-30-252 face]$ sudo rm index.php
[ec2-user@ip-172-31-30-252 face]$ ls
composer.json composer.lock sample.jpg vendor
[ec2-user@ip-172-31-30-252 face]$ sudo vim index.php
[ec2-user@ip-172-31-30-252 face]$ sudo php index.php
Image upload done... Here is the URL: https://kamal-demo.s3.us-east-2.amazonaws.
[ec2-user@ip-172-31-30-252 face]$ 

```

# Screenshots of EC2 & Rekognition:

## 1. Face Detect success screenshot

The screenshot shows a terminal window on an Amazon Linux 2 EC2 instance. The user has run a PHP script named index.php, which uploads a sample image and performs face detection. The output indicates 9 faces were found in the image.

```
ec2-user@ip-172-31-30-252:~$ sudo php index.php
Image upload done... Here is the URL: https://kamal-demo.s3.us-east-2.amazonaws.com/sample.jpgTotally there are 9 faces[ec2-user@ip-172-31-30-252 face]$
```

The terminal also shows the user has installed httpd and configured it to start at boot. The system status is shown as active (running).

```
[ec2-user@ip-172-31-30-252 ~]$ sudo httpd -M
Loaded modules: core, so, http2, unixODBC, cgi, cgid, http, headers, mpm_prefork, priorities, update-motd
No such command: tele.php. Please use /bin/yum --help
[ec2-user@ip-172-31-30-252 ~]$ sudo vim tele.php
[ec2-user@ip-172-31-30-252 ~]$ sudo status httpd.service
httpd.service: active (running) since Sun Mar 29 01:15:32 2020
  Main process: /usr/sbin/httpd
  Tasks: 1 (limit: 4900)
  Memory: 2.4 kB
  CGroup: /system.slice/httpd.service
          └─1: /usr/sbin/httpd -DFOREGROUND
```

The desktop environment at the bottom of the screen includes icons for File Explorer, Task View, Start, Taskbar, and other system utilities.