

## Hosting Website:-

### Creating VPC

aws

Services

Search

[Alt+S]

VPC > Your VPCs > Create VPC

Create VPC [Info](#)

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.

**VPC settings**

Resources to create [Info](#)

Create only the VPC resource or the VPC and other networking resources.

☒ VPC only ☐ VPC and more

Name tag - optional [Info](#)

Creates a tag with a key of 'Name' and a value that you specify.

my-vpc-1

IPv4 CIDR block [Info](#)

☒ IPv4 CIDR manual input ☐ IPAM-allocated IPv4 CIDR block

IPv4 CIDR

10.0.0.0/16

CIDR block size must be between /16 and /28.

IPv6 CIDR block [Info](#)

☒ No IPv6 CIDR block ☐ IPAM-allocated IPv6 CIDR block ☐ Amazon-provided IPv6 CIDR block ☐ IPv6 CIDR owned by me

Tenancy [Info](#)

Default

**Tags**

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key

Value - optional

Q Name X

Q my-vpc-1 X

Remove tag

Add tag

You can add 49 more tags

Cancel Create VPC

## Creating public and private subnet

**VPC**

VPC ID

Create subnets in this VPC.

vpc-02f703072d62cf819 (my-vpc-1) ▼

**Associated VPC CIDRs**

IPv4 CIDRs

10.0.0.0/16

**Subnet settings**

Specify the CIDR blocks and Availability Zone for the subnet.

**Subnet 1 of 1**

Subnet name

Create a tag with a key of 'Name' and a value that you specify.

my-pub-sub-1

The name can be up to 256 characters long.

Availability Zone [Info](#)

Choose the zone in which your subnet will reside, or let Amazon choose one for you.

US East (N. Virginia) / us-east-1a ▼

IPv4 VPC CIDR block [Info](#)

Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

10.0.0.0/16 ▼

IPv4 subnet CIDR block

10.0.0.0/20 4,096 IPs

< > ^ v

▼ Tags - optional

Key	Value - optional	
Q Name X	Q my-pub-sub-1 X	Remove
<button>Add new tag</button>		
<p>You can add 49 more tags.</p>		
<button>Remove</button>		
<button>Add new subnet</button>		

Cancel **Create subnet**

## VPC

### VPC ID

Create subnets in this VPC.

vpc-02f703072d62cf819 (my-vpc-1)

### Associated VPC CIDRs

IPv4 CIDRs

10.0.0.0/16

## Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

### Subnet 1 of 1

#### Subnet name

Create a tag with a key of 'Name' and a value that you specify.

my-pri-sub-net

The name can be up to 256 characters long.

#### Availability Zone [Info](#)

Choose the zone in which your subnet will reside, or let Amazon choose one for you.

US East (N. Virginia) / us-east-1b

#### IPv4 VPC CIDR block [Info](#)

Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

10.0.0.0/16

#### IPv4 subnet CIDR block

10.0.1.0/20

4,096 IPs

< > ^ v

#### ▼ Tags - optional

Key

Value - optional

Q Name

X

Q my-pri-sub-net

X

Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel

Create subnet

## Creating Internet-Gateway

[VPC](#) > [Internet gateways](#) > Create internet gateway

### Create internet gateway [Info](#)

An internet gateway is a virtual router that connects a VPC to the internet. To create a new internet gateway specify the name for the gateway below.

#### Internet gateway settings

##### Name tag

Creates a tag with a key of 'Name' and a value that you specify.

#### Tags - *optional*

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key



Value - *optional*



Remove

Add new tag

You can add 49 more tags.

Cancel

Create internet gateway

## Attaching VPC to Internet Gateway

The screenshot shows the AWS Management Console interface. The breadcrumb navigation at the top reads: [VPC](#) > [Internet gateways](#) > [Attach to VPC \(igw-04b96c56fd989c6ec\)](#). The main heading is **Attach to VPC (igw-04b96c56fd989c6ec)** with an [Info](#) link. Below this, a box titled **VPC** contains the instruction: "Attach an internet gateway to a VPC to enable the VPC to communicate with the internet. Specify the VPC to attach below." Underneath, a section titled **Available VPCs** says "Attach the internet gateway to this VPC." and features a search input field containing "vpc-02f703072d62cf819". Below the search field is a link for the **AWS Command Line Interface command**. At the bottom right of the dialog are two buttons: **Cancel** and **Attach internet gateway**.

## Creating Route-table and editing explicit subnet association and adding public subnet

The screenshot displays the AWS Management Console's **Route tables** page. The left-hand navigation pane shows the **Virtual private cloud** section expanded, with **Route tables** selected. The main content area is titled **Route tables (1/3)** and includes a search bar and a table of route tables. The table has columns for Name, Route table ID, Explicit subnet associations, Edge associations, Main, and VPC. One route table, **my-route-table-1** (ID: rtb-0c67994549df53936), is selected. Below the table, the **Subnet associations** tab is active for **rtb-0c67994549df53936 / my-route-table-1**. This tab shows two sections: **Explicit subnet associations (1)** and **Subnets without explicit associations (1)**. The first section contains a table with one entry: **my-pub-sub-1** (Subnet ID: subnet-0a8c0fbd8e763acd4) with an IPv4 CIDR of 10.0.0.0/20. The second section contains a table with one entry: **my-pri-sub-net** (Subnet ID: subnet-0766f95a3ad3538c8) with an IPv4 CIDR of 10.0.16.0/20. Both sections have an **Edit subnet associations** button.

## Editing Routes

The screenshot shows the 'Edit routes' page in the AWS Management Console. The page title is 'Edit routes'. Below the title, there is a table with columns: Destination, Target, Status, and Propagated. The table contains two rows of route information. The first row has Destination '10.0.0.0/16', Target 'local', Status 'Active', and Propagated 'No'. The second row has Destination '0.0.0.0/0', Target 'Internet Gateway', Status '-', and Propagated 'No'. Below the table, there is an 'Add route' button. At the bottom right, there are 'Cancel', 'Preview', and 'Save changes' buttons.

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
0.0.0.0/0	Internet Gateway	-	No

Buttons: Add route, Cancel, Preview, Save changes

## Creating EC2 Instance

The screenshot shows the 'Create new EC2 instance' page in the AWS Management Console. The page is divided into two main sections: 'Configuration' on the left and 'Summary' on the right. The 'Configuration' section includes fields for VPC, Subnet, Auto-assign public IP, Firewall (security group), Security group name, Description, and Inbound Security Group Rules. The 'Summary' section includes fields for Number of instances, Software image, Virtual server type, Firewall (security group), and Storage. A 'Launch instance' button is visible at the bottom right of the 'Summary' section. A 'Free tier' banner is also present, indicating that the instance is eligible for the free tier.

**Configuration:**

- VPC: vpc-02703072462d919 (my-vpc-1)
- Subnet: subnet-04b0b0b0763e0d4 (my-pub-sub-1)
- Auto-assign public IP: Enable
- Firewall (security group): Create security group
- Security group name: my-ec2-security-group
- Description: launch-wizard-1 created 2024-02-27T09:10:06.632Z
- Inbound Security Group Rules: Security group rule 1 (TCP, 22, 0.0.0.0/0)

**Summary:**

- Number of instances: 1
- Software image: Amazon Linux 2023 AMI 2023.5.2
- Virtual server type: t2.micro
- Firewall (security group): New security group
- Storage (EBS): 1 volume(s) - 8 GiB

Buttons: Launch instance, Review commands

## Connecting EC2

```
aws Services Search [Alt+S] N. Virginia voclabs/user3011557=amol.kanchar@dictinc.com @ 4629-7248-7428

Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

[ec2-user@ip-10-0-1-2 ~]$
```

```
aws Services Search [Alt+S] N. Virginia voclabs/user3011557=amol.kanchar@dictinc.com @ 4629-7248-7

Last login: Tue Feb 27 09:14:57 2024 from 18.206.107.29
[ec2-user@ip-10-0-1-2 ~]$ sudo su
[root@ip-10-0-1-2 ec2-user]# yum update -y
Last metadata expiration check: 19:44:37 ago on Tue Feb 27 09:13:50 2024.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-10-0-1-2 ec2-user]# yum install httpd
Last metadata expiration check: 19:44:52 ago on Tue Feb 27 09:13:50 2024.
Package httpd-2.4.58-1.amzn2023.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-10-0-1-2 ec2-user]# systemctl start httpd
[root@ip-10-0-1-2 ec2-user]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Active: active (running) since Wed 2024-02-28 04:49:19 UTC; 10min ago
     Docs: man:httpd.service(8)
  Main PID: 1986 (httpd)
    Status: "Total requests: 0; Idle/Busy workers 100/0; Requests/sec: 0; Bytes served/sec: 0 B/sec"
    Tasks: 177 (limit: 1114)
   Memory: 18.3M
      CPU: 421ms
   CGroup: /system.slice/httpd.service
           └─1986 /usr/sbin/httpd -DFOREGROUND
             └─1988 /usr/sbin/httpd -DFOREGROUND
               └─1989 /usr/sbin/httpd -DFOREGROUND
                 └─1990 /usr/sbin/httpd -DFOREGROUND
                   └─1991 /usr/sbin/httpd -DFOREGROUND

Feb 28 04:49:18 ip-10-0-1-2.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Feb 28 04:49:19 ip-10-0-1-2.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Feb 28 04:49:19 ip-10-0-1-2.ec2.internal httpd[1986]: Server configured, listening on: port 80
```

```
aws Services Search [Alt+S] N. Virginia voclabs/user3011557=amol.kanchar@dctinc.com @ 4629-7248-
• httpd.service - The Apache HTTP Server
  Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
  Active: active (running) since Wed 2024-02-28 04:49:19 UTC; 10min ago
  Docs: man:httpd.service(8)
  Main PID: 1986 (httpd)
  Status: "Total requests: 0; Idle/Busy workers 100/0; Requests/sec: 0; Bytes served/sec: 0 B/sec"
  Tasks: 177 (limit: 1114)
  Memory: 18.3M
  CPU: 421ms
  CGroup: /system.slice/httpd.service
          └─1986 /usr/sbin/httpd -DFOREGROUND
            └─1988 /usr/sbin/httpd -DFOREGROUND
              └─1989 /usr/sbin/httpd -DFOREGROUND
                └─1990 /usr/sbin/httpd -DFOREGROUND
                  └─1991 /usr/sbin/httpd -DFOREGROUND

Feb 28 04:49:18 ip-10-0-1-2.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Feb 28 04:49:19 ip-10-0-1-2.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Feb 28 04:49:19 ip-10-0-1-2.ec2.internal httpd[1986]: Server configured, listening on: port 80
[root@ip-10-0-1-2 ec2-user]# cd /var/www/html
[root@ip-10-0-1-2 html]# ls
index.html
[root@ip-10-0-1-2 html]# rm -r index.html
rm: remove regular file 'index.html'? yes
[root@ip-10-0-1-2 html]# ls
[root@ip-10-0-1-2 html]# sudo chown -R $USER /var/www/html
[root@ip-10-0-1-2 html]# sudo chmod 777 /var/www/html
[root@ip-10-0-1-2 html]#
```

## Transferring html file from local machine to remote machine

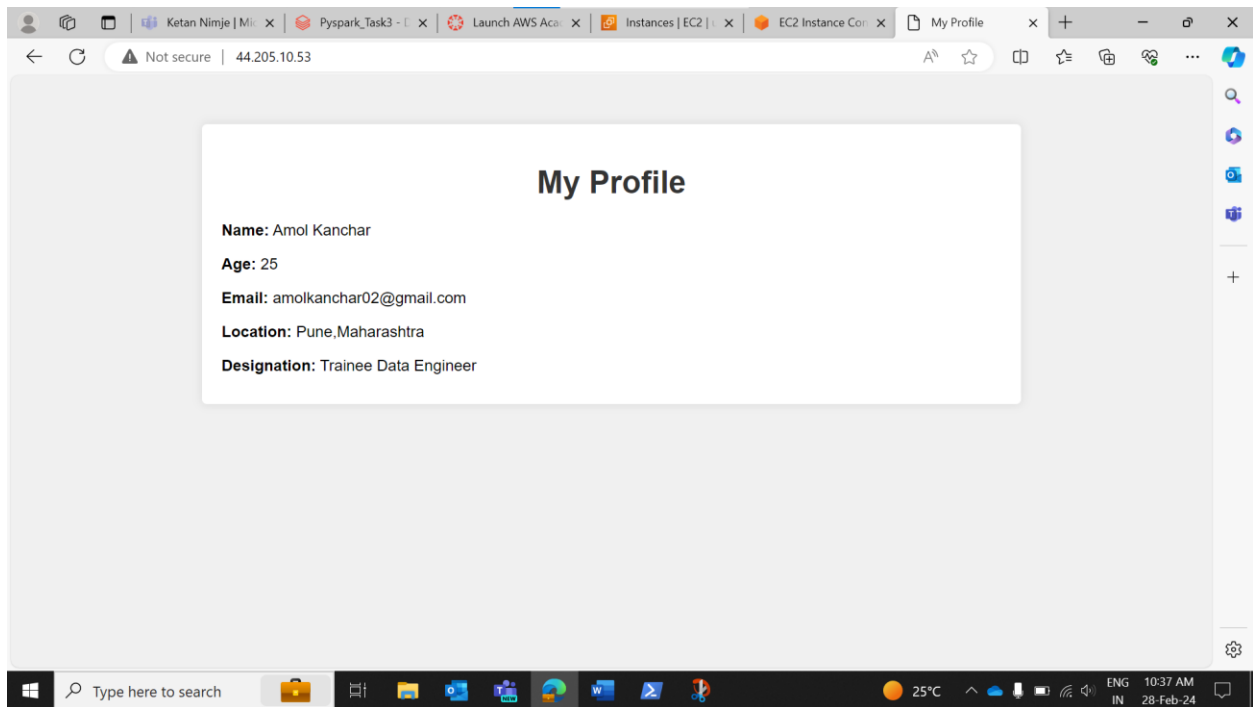
```
Windows PowerShell
Windows PowerShell
copyright (c) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Amol.Kanchar> scp -i c:\Users\Amol.Kanchar\Downloads\wha.pem c:\Users\Amol.Kanchar\Downloads\index.html ec2-user@44.205.10.53:/var/www/html
The authenticity of host '44.205.10.53 (44.205.10.53)' can't be established.
ECDSA key fingerprint is SHA256:Doy019xersVlryw6b1vum591u57jE8dBLP0gABYAFQA.
Are you sure you want to continue connecting (yes/no/[fingerprint])?
Warning: Permanently added '44.205.10.53' (ECDSA) to the list of known hosts.
index.html
PS C:\Users\Amol.Kanchar>
```

```
[root@ip-10-0-1-2 html]# ls -l
total 4
-rw-rw-r--. 1 ec2-user ec2-user 1174 Feb 28 05:04 index.html
[root@ip-10-0-1-2 html]#
```





## Creating EC2 with Windows Machine AMI

aws

Services

Search

[Alt+S]

EC2 > Instances > Launch an instance

Launch an instance

Info

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags

Info

Name

wha1

Add additional tags

▼ Application and OS Images (Amazon Machine Image)

Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Search our full catalog including 1000s of application and OS images

RecentsQuick Start

Amazon Linux

macOS

Ubuntu

Windows

Red Hat

SUSE L

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Microsoft Windows Server 2022 Base

ami-0f9c44e98edf38a2b (64-bit (x86))

Virtualization: hvm   ENA enabled: true   Root device type: ebs

Free tier eligible

Description

Microsoft Windows Server 2022 Full Locale English AMI provided by Amazon

Architecture

AMI ID

Verified provider

64-bit (x86)

ami-0f9c44e98edf38a2b

▼ Summary

Number of instances

Info

1

Software Image (AMI)

Microsoft Windows Server 2022 ...read more

ami-0f9c44e98edf38a2b

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 30 GiB

Free tier:

In your first year includes

750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel

Launch instance

Review commands



## ▼ Instance type [Info](#) | [Get advice](#)

### Instance type

t2.micro Free tier eligible

Family: t2 1 vCPU 1 GiB Memory Current generation: true  
On-Demand Windows base pricing: 0.0162 USD per Hour  
On-Demand SUSE base pricing: 0.0116 USD per Hour  
On-Demand RHEL base pricing: 0.0716 USD per Hour  
On-Demand Linux base pricing: 0.0116 USD per Hour

☒ All generations

[Compare instance types](#)

Additional costs apply for AMIs with pre-installed software

## ▼ Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

wha

[Create new key pair](#)

For Windows instances, you use a key pair to decrypt the administrator password. You then use the decrypted password to connect to your instance.

## ▼ Network settings [Info](#)

VPC - *required* [Info](#)

vpc-02f703072d62cf819 (my-vpc-1)  
10.0.0.0/16



Subnet [Info](#)

subnet-0a8c0fbd8e763acd4 my-pub-sub-1  
VPC: vpc-02f703072d62cf819 Owner: 462972487428 Availability Zone: us-east-1a  
IP addresses available: 4090 CIDR: 10.0.0.0/20

[Create new subnet](#)

Auto-assign public IP [Info](#)

Enable

Firewall (security groups) [Info](#)

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☐ Create security group

☒ Select existing security group

Common security groups [Info](#)

Select security groups

[Compare security groups](#)

## ▼ Summary

Number of instances [Info](#)

1

Software Image (AMI)

Microsoft Windows Server 2022 ...[read more](#)  
ami-0f9c44e98edf38a2b

Virtual server type (instance type)

t2.micro

Firewall (security group)

my-vp-security-group

Storage (volumes)

1 volume(s) - 30 GiB

**Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

[Cancel](#)

[Launch instance](#)

[Review commands](#)

## Adding RDP in security group of instance

The screenshot shows the AWS Management Console interface. On the left, the navigation menu includes 'Instances' and 'Images'. The main content area displays the 'Details' of a security group named 'my-vp-security-group'. The details include the Security group ID 'sg-0a8b6166108d6e414', Description 'launch-wizard-1 created 2024-02-27T09:10:08.632Z', VPC ID 'vpc-02f703072d62cf819', Owner '462972487428', Inbound rules count '3 Permission entries', and Outbound rules count '1 Permission entry'.

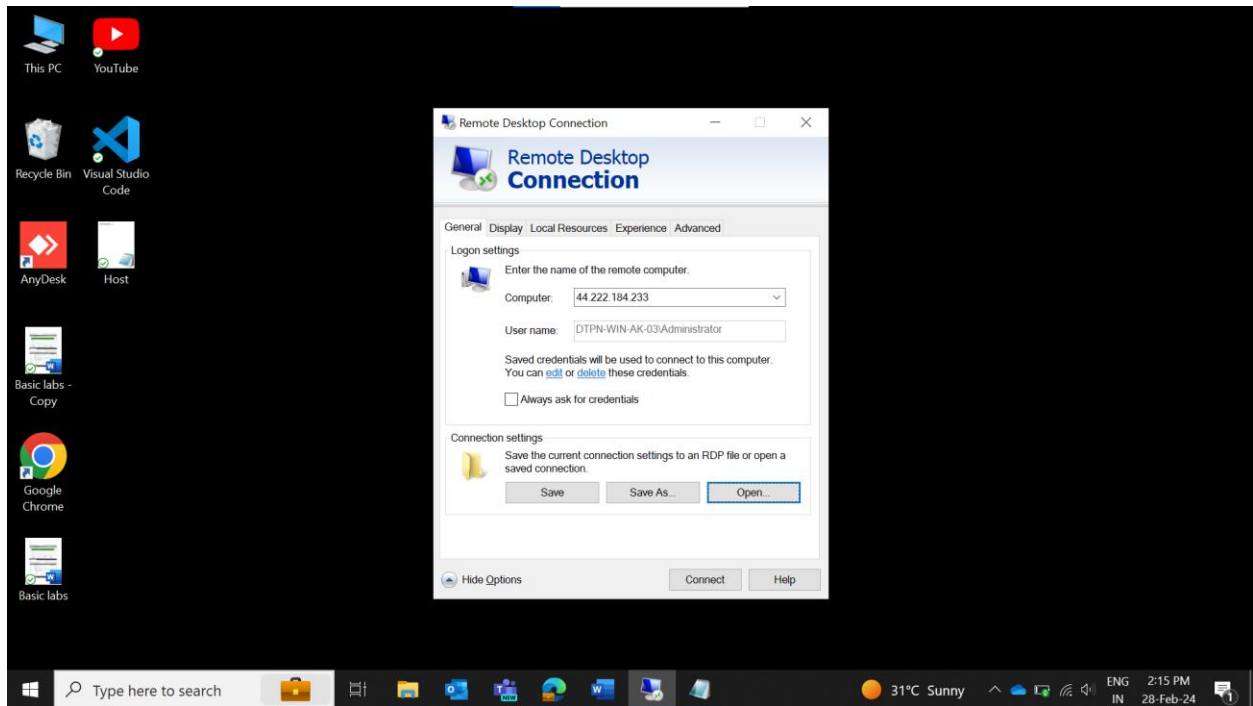
Below the details, the 'Inbound rules' tab is selected, showing a table of inbound rules:

	Name	Security group rule...	IP version	Type	Protocol	Port range
<input checked="" type="checkbox"/>	-	sg-00fa6ccf6485756c1	IPv4	RDP	TCP	3389
<input type="checkbox"/>	-	sg-0af071169749030...	IPv4	SSH	TCP	22
<input type="checkbox"/>	-	sg-0fe203f7af9adf079	IPv4	HTTP	TCP	80

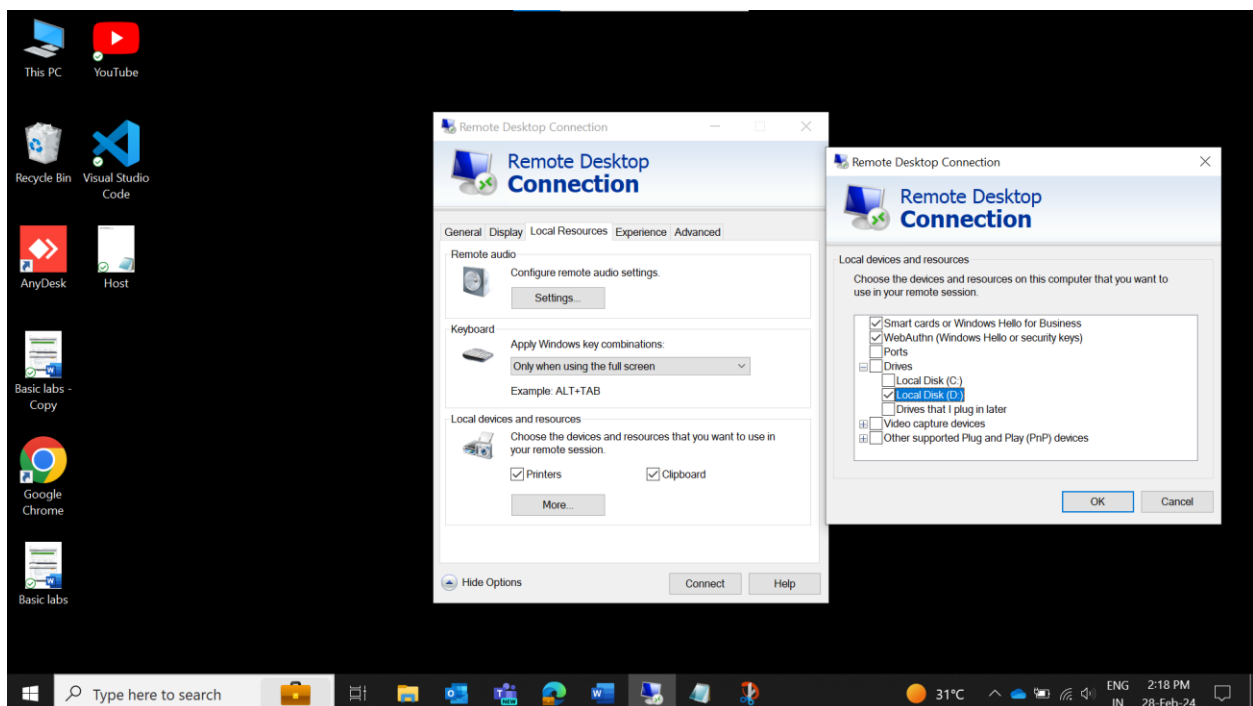
## Connecting EC2 using RDP client, downloading Remote Desktop File:-

The screenshot shows the AWS Management Console interface for connecting to an EC2 instance. The 'Session Manager' tab is selected, and the 'RDP client' sub-tab is active. The instance ID is 'i-0e75710d1ee53d827 (wha1)'. The 'Connection Type' section shows two options: 'Connect using RDP client' (selected) and 'Connect using Fleet Manager'. The 'Connect using RDP client' option includes a 'Download remote desktop file' button. Below this, the public IP is '44.222.184.233' and the username is 'Administrator'. A note at the bottom states: 'If you've joined your instance to a directory, you can use your directory credentials to connect to your instance.'

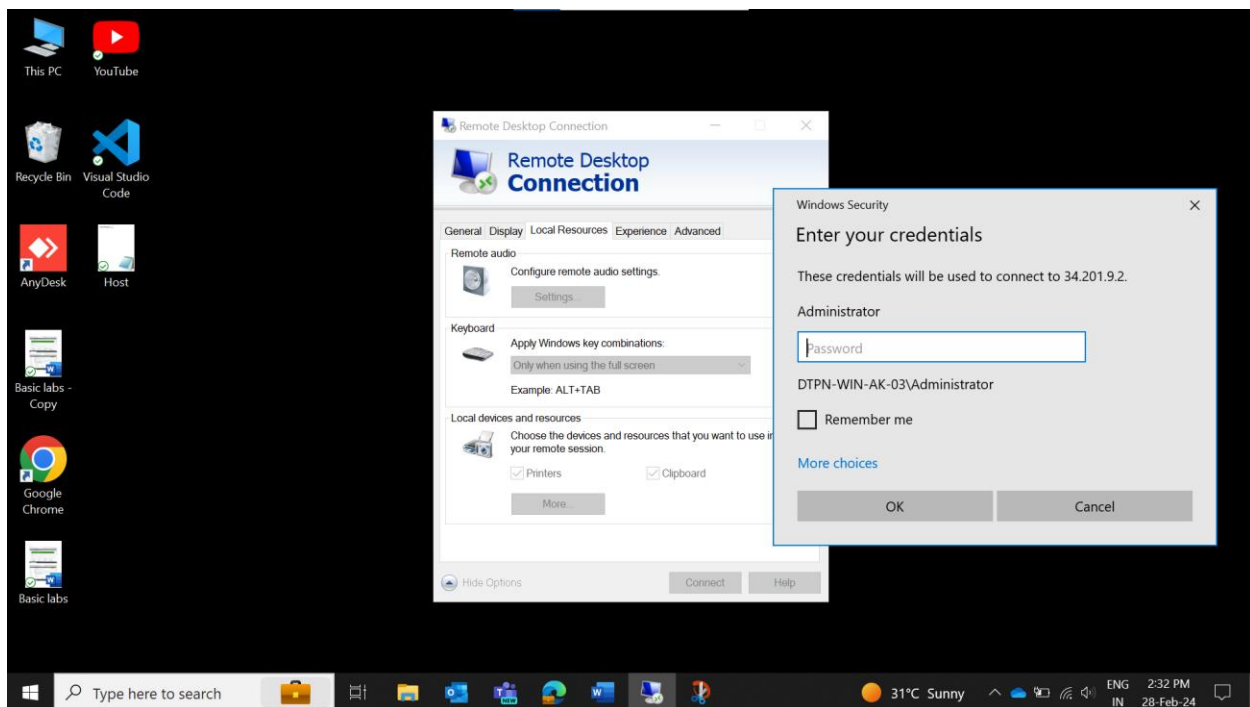
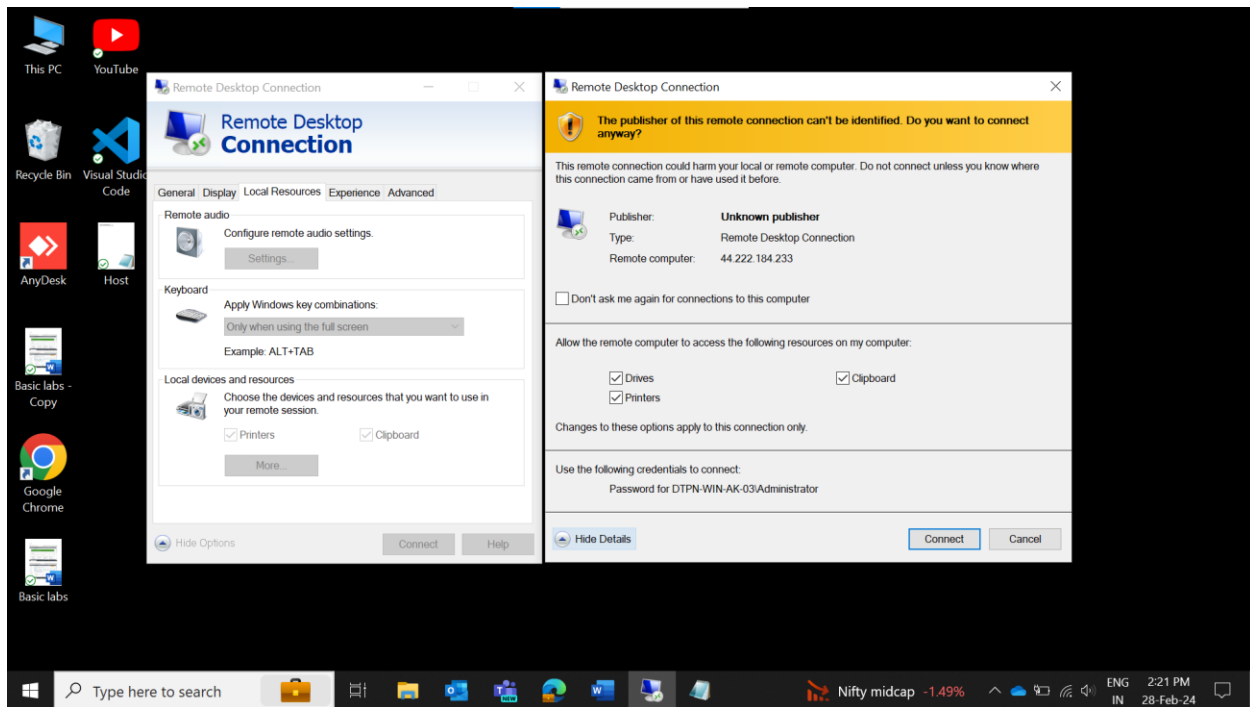
Opening Remote Desktop Connection on local machine and in connection settings open file where RDP file is downloaded:-

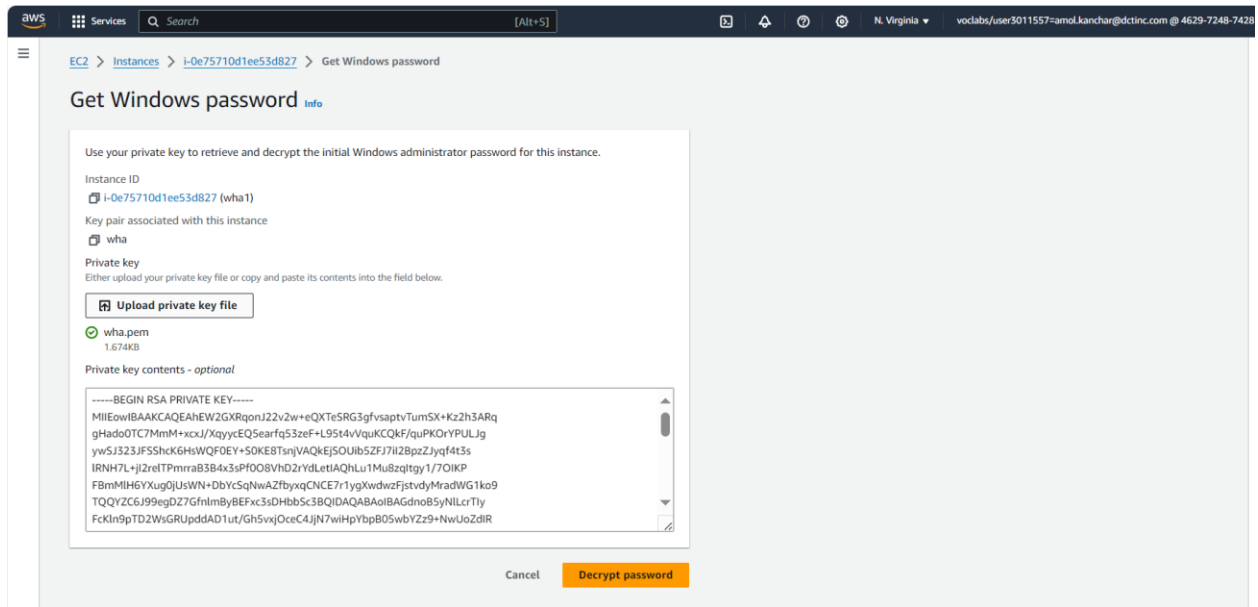


Then going on local resources, click on more and give access to drive where your html file is located

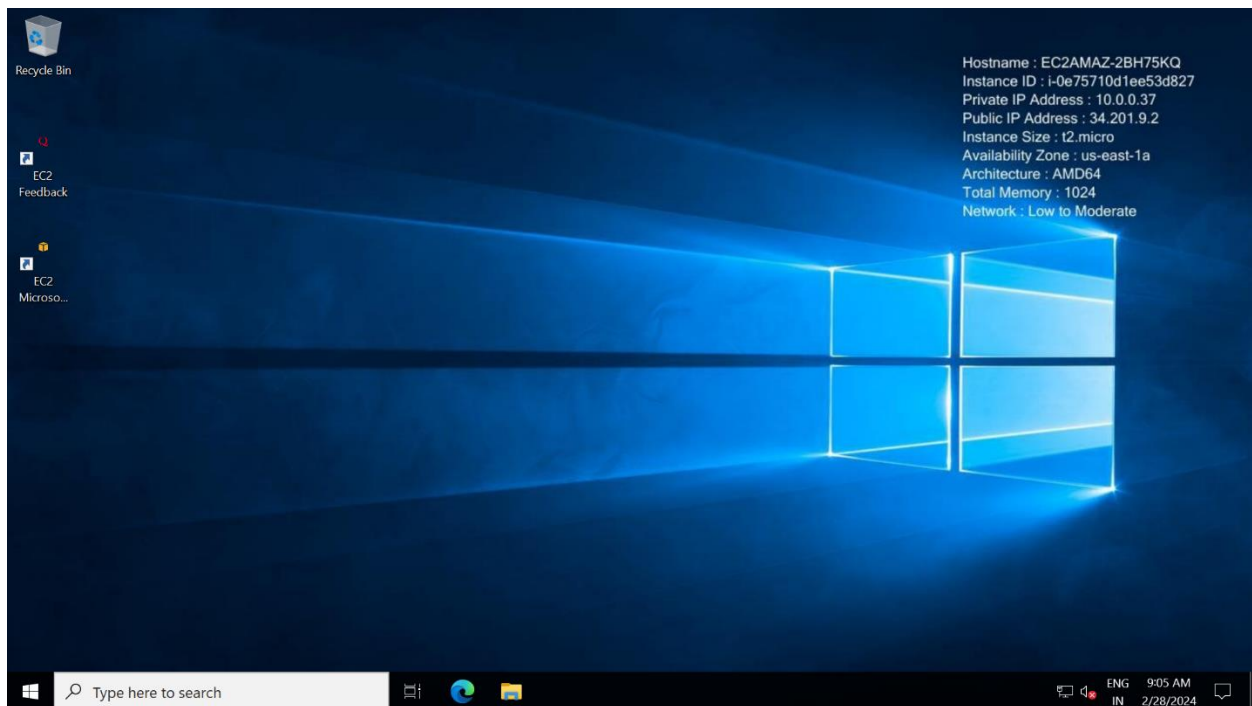


Then connect and get password from EC2 connect:-

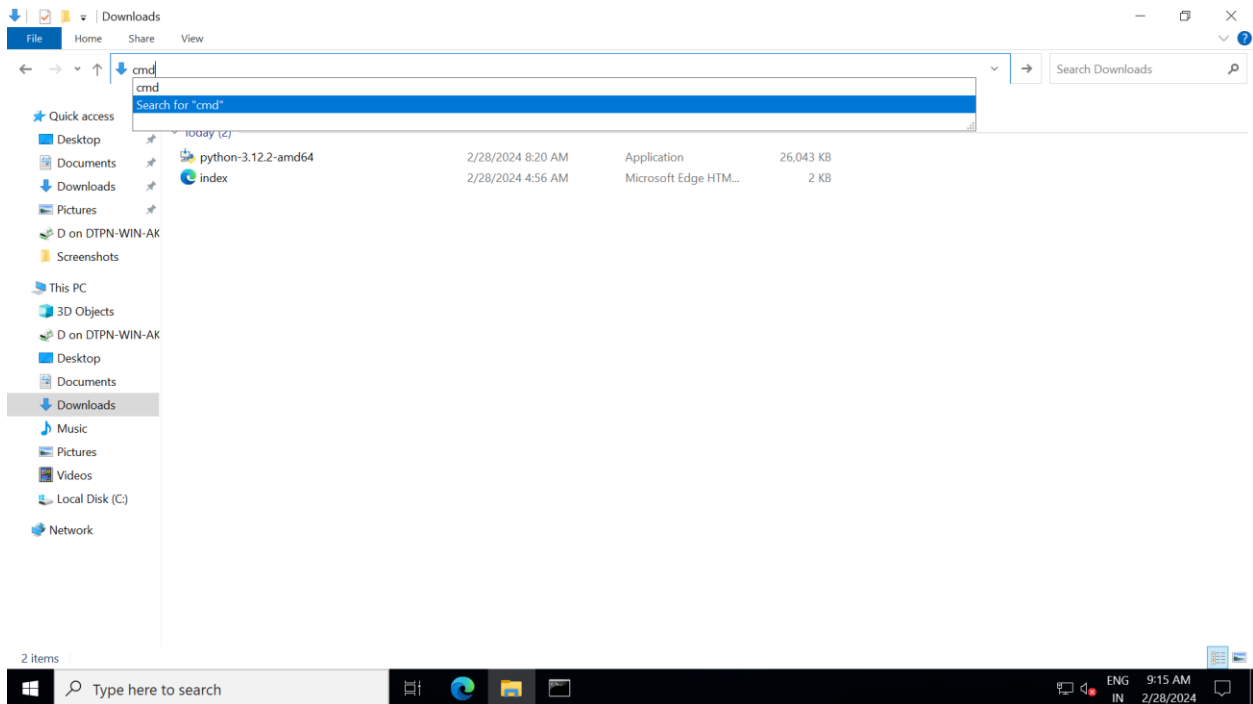
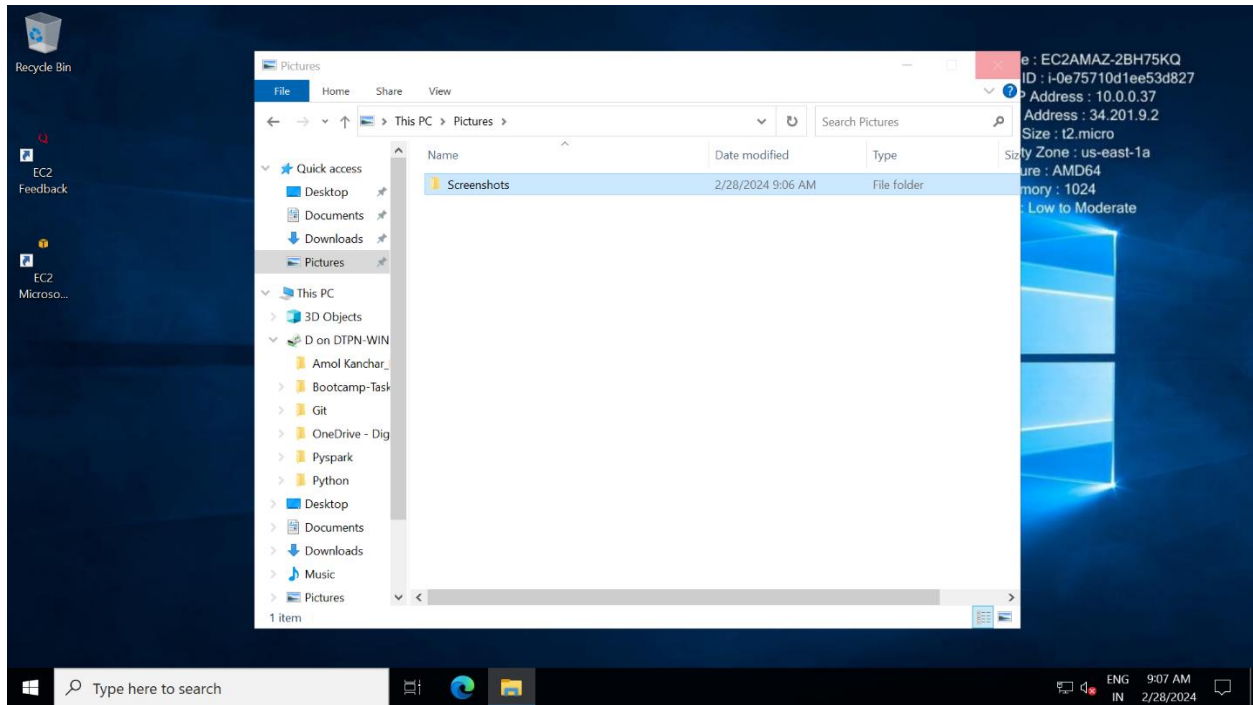




## Connecting Windows AMI:-



Download python in EC2 machine and open cmd where html file is located:-





```
Administrator: C:\Windows\System32\cmd.exe - python -m http.server
Microsoft Windows [Version 10.0.20348.2322]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Administrator\Downloads>python --version
Python 3.12.2

C:\Users\Administrator\Downloads>python -m http.server
Serving HTTP on :: port 8000 (http://[::]:8000/) ...
```

Then going to web page and type localhost:8000

