

AWS-CLOUD

Presented by
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Agenda

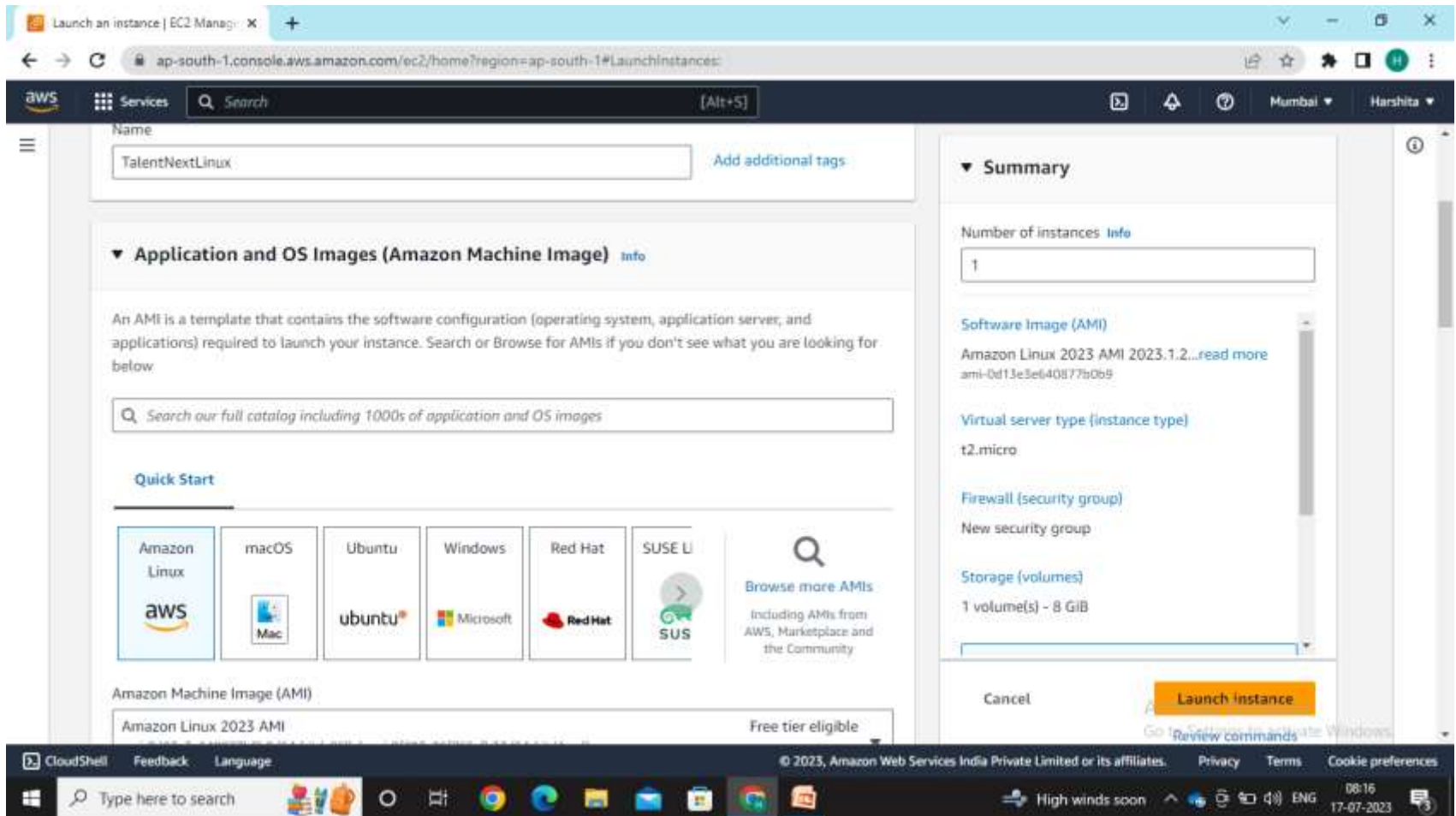
Connect Linux EC2 Instance

Configure web server on Linux Instance

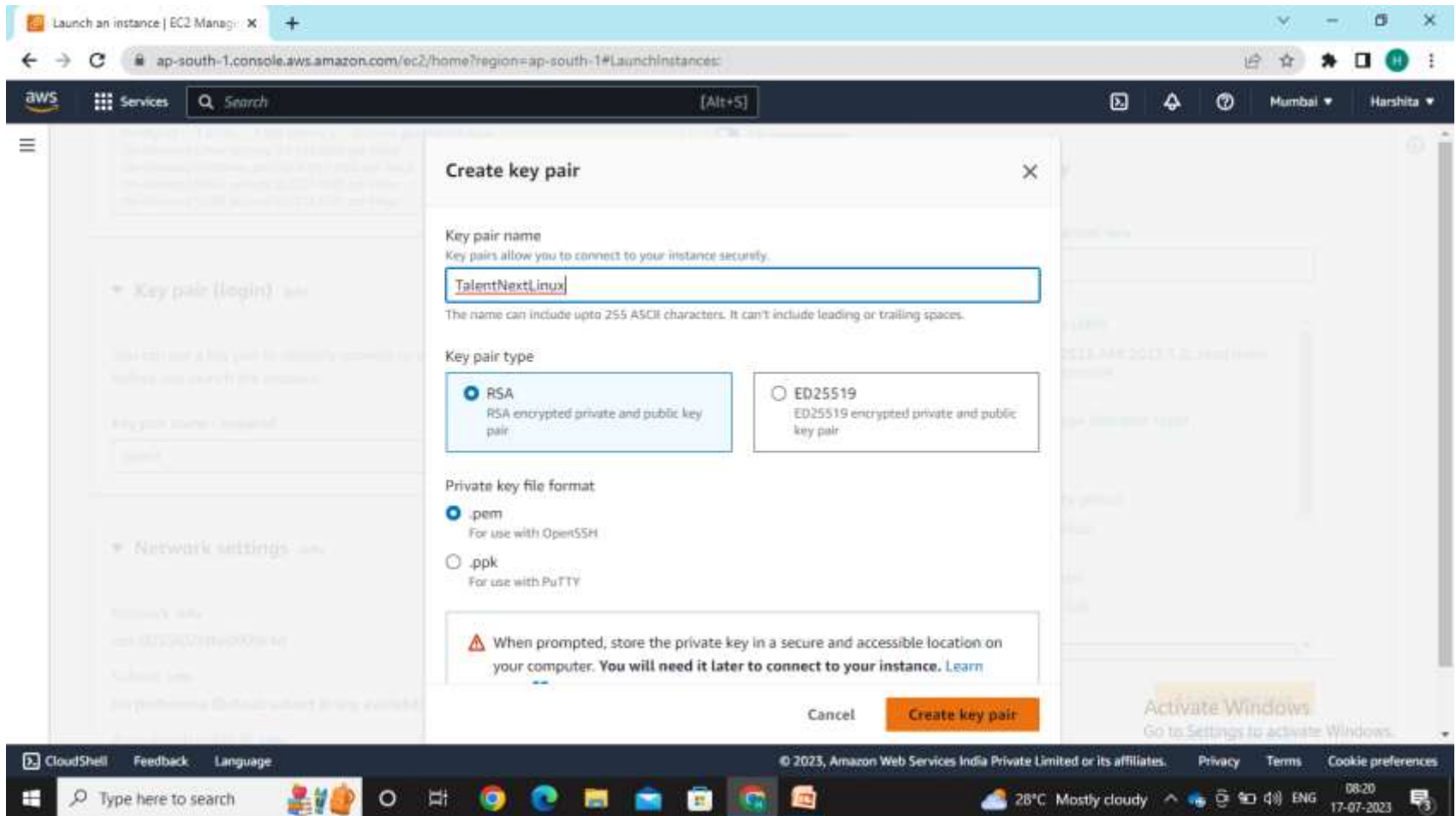
Task:

- Create Linux free tier EC2 instance
- Deploy personal website on it
- Terminate EC2 instance

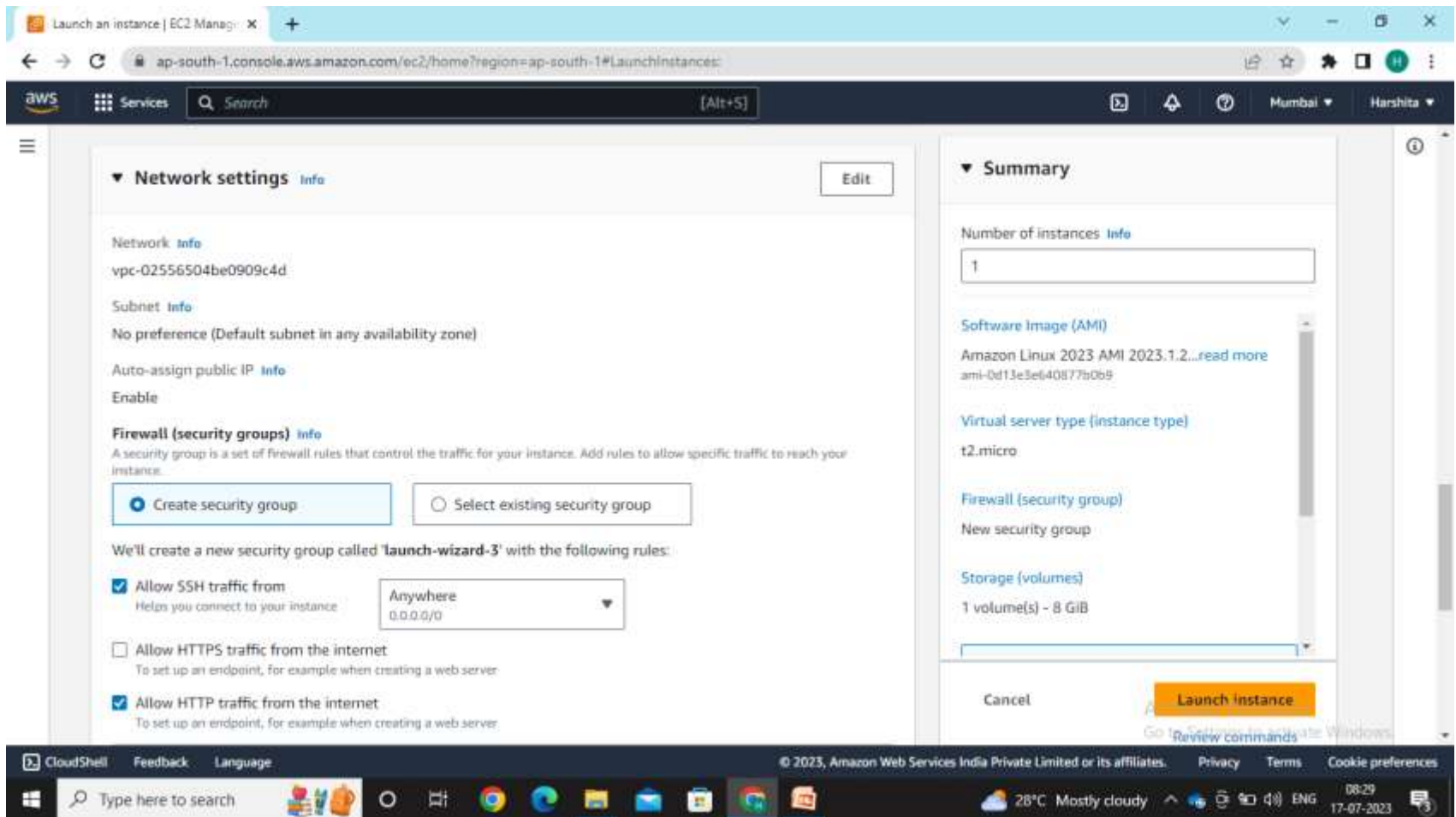
AWS-Cloud Console->services->compute->EC2->Launch Instance->Name and Tags(TalentNextLinux)->AMI(Linux)



Instance type->t2.micro->key pair(login) is used to retrieve the password->create key pair->name=TalentNextLinux->create key pair then the pem file will be downloaded into our system



Network settings->allow SSH & HTTP(select anywhere ,not MyIP since it changes all the time as the internet providers changes that everytime ->Configure storage->9GiB RAM & gp3 hardware->keep advance details as default and then lastly launch instance



Instances | EC2 Management Console

ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#instances:

aws Services Search [Alt+S]

Mumbai Harshita

New EC2 Experience
Tell us what you think

EC2 Dashboard
EC2 Global View
Events

Instances

- Instances
- Instance Types
- Launch Templates
- Spot Requests
- Savings Plans
- Reserved Instances
- Dedicated Hosts
- Capacity Reservations

Images

- AMIs
- AMI Catalog

Elastic Block Store

Instances (1/1) Info

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
TalentNextLinux	i-0578c0ba80b683a5a	Running	t2.micro	Initializing	No alarms	ap-south-1a

Instance: i-0578c0ba80b683a5a (TalentNextLinux)

Details Security Networking Storage Status checks Monitoring Tags

Instance summary Info

Instance ID
i-0578c0ba80b683a5a (TalentNextLinux)

IPv6 address
-

Hostname type
IP name: ip-172-31-43-218.ap-south-

Public IPv4 address
43.205.110.69 | open address

Instance state
Running

Private IP DNS name (IPv4 only)
ip-172-31-43-218.ap-south-1.compute.internal

Private IPv4 addresses
172.31.43.218

Public IPv4 DNS
ec2-43-205-110-69.ap-south-1.compute.amazonaws.com | open address

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Type here to search Humid 08:33 17-07-2023

Now connect to instance, here we have two ways, one is EC2 instance connect and another is SSH Client.

Now let's see through EC2 instance connect which is online and here the default name is ec2-user as like in the windows it given as Administrator -> click connect

The screenshot shows the AWS Management Console interface for connecting to an EC2 instance. The browser address bar shows the URL: `ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#ConnectToInstance:instanceId=i-0578c0ba80b683a5a`. The console header includes the AWS logo, a search bar, and navigation links for Services, Mumbai, and Harshita. The breadcrumb trail is: `EC2 > Instances > i-0578c0ba80b683a5a > Connect to instance`.

The main heading is "Connect to instance" with an "Info" link. Below it, a subtitle reads: "Connect to your instance i-0578c0ba80b683a5a (TalentNextLinux) using any of these options".

There are four tabs for connection methods: "EC2 Instance Connect" (selected), "Session Manager", "SSH client", and "EC2 serial console".

Under the "EC2 Instance Connect" tab, the "Instance ID" is `i-0578c0ba80b683a5a (TalentNextLinux)`. The "Connection Type" section has two options: "Connect using EC2 Instance Connect" (selected, with a description: "Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.") and "Connect using EC2 Instance Connect Endpoint" (description: "Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.").

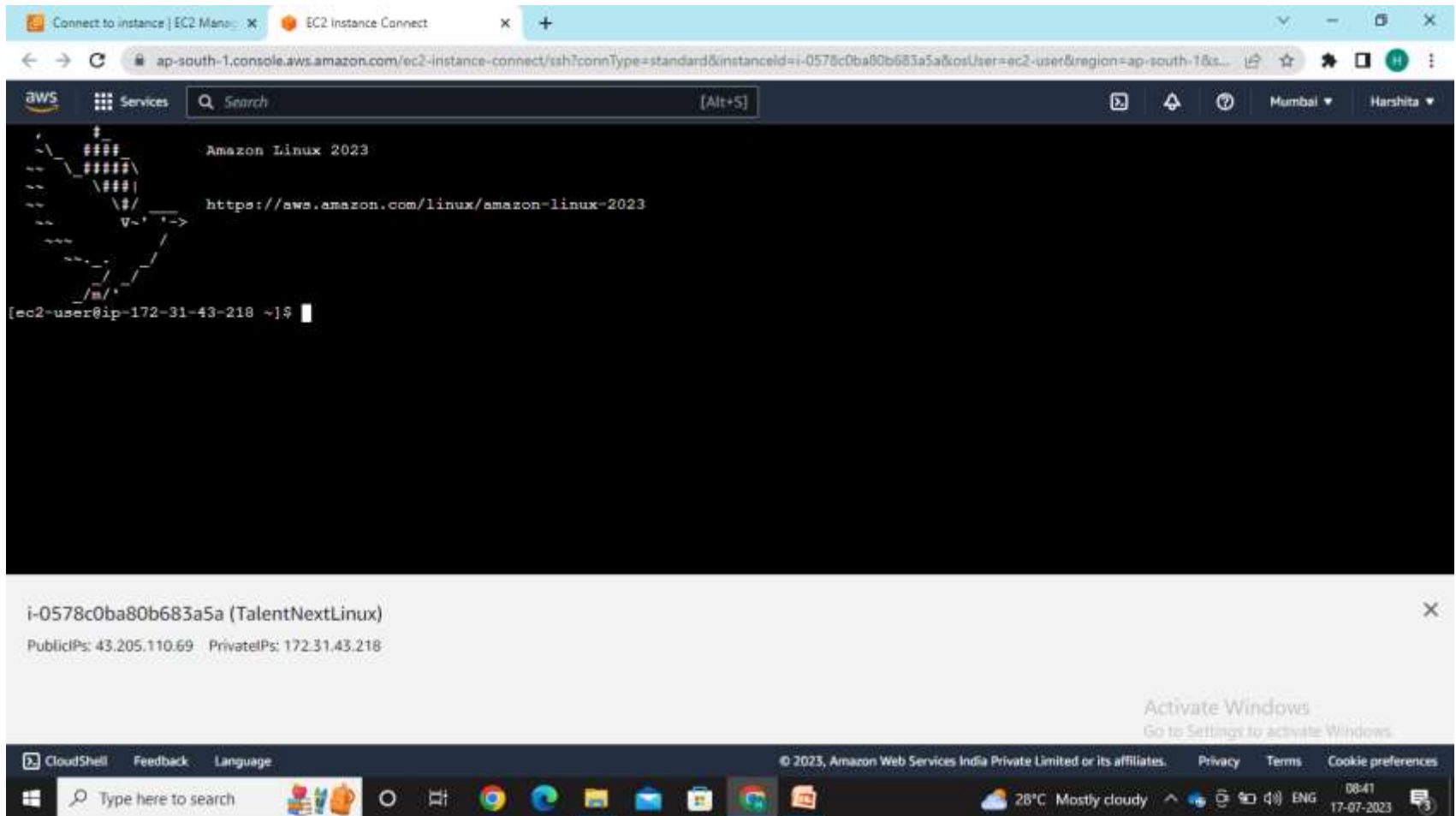
The "Public IP address" is `43.205.110.69`. The "User name" field is labeled "Enter the user name defined in the AMI used to launch the instance. If you didn't define a custom user name, use the default user name, ec2-user." and contains the text `ec2-user`.

A note at the bottom states: "Note: In most cases, the default user name, ec2-user, is correct. However, read your AMI usage instructions to".

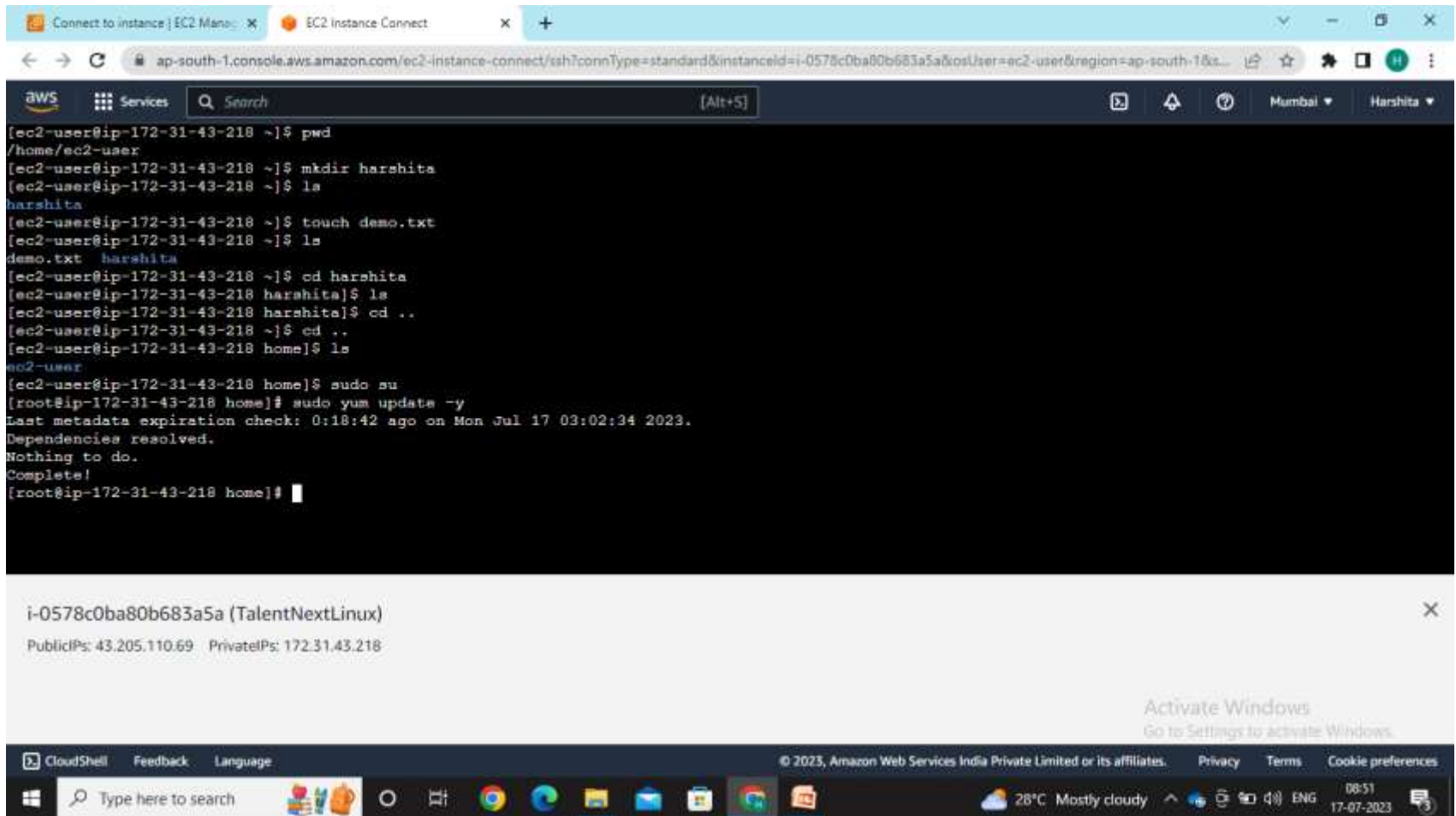
The footer of the console shows "Activate Windows" and "Go to Settings to activate Windows." along with copyright information for Amazon Web Services India Private Limited and links for Privacy, Terms, and Cookie preferences.

The Windows taskbar at the bottom shows the search bar, task view button, and several application icons (Chrome, Edge, File Explorer, Mail, Calendar, etc.). The system tray shows the date and time as 08:40 on 17-07-2023, and the weather as 28°C Mostly cloudy.

Now it looks like this and now we use public IP address to connect through the command prompt



Basic commands in Linux



The screenshot shows a web browser window with the AWS console. The active tab is 'EC2 Instance Connect'. The address bar shows the URL: `ap-south-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0578c0ba80b683a5a&osUser=ec2-user®ion=ap-south-1&...`. The main content area displays the AWS CloudShell interface. At the top, there's a navigation bar with the AWS logo, 'Services' link, a search bar, and user information 'Mumbai' and 'Harshita'. The terminal window shows the following commands and output:

```
[ec2-user@ip-172-31-43-218 ~]$ pwd
/home/ec2-user
[ec2-user@ip-172-31-43-218 ~]$ mkdir harshita
[ec2-user@ip-172-31-43-218 ~]$ ls
harshita
[ec2-user@ip-172-31-43-218 ~]$ touch demo.txt
[ec2-user@ip-172-31-43-218 ~]$ ls
demo.txt  harshita
[ec2-user@ip-172-31-43-218 ~]$ cd harshita
[ec2-user@ip-172-31-43-218 harshita]$ ls
[ec2-user@ip-172-31-43-218 harshita]$ cd ..
[ec2-user@ip-172-31-43-218 ~]$ cd ..
[ec2-user@ip-172-31-43-218 home]$ ls
ec2-user
[ec2-user@ip-172-31-43-218 home]$ sudo su
[root@ip-172-31-43-218 home]# sudo yum update -y
Last metadata expiration check: 0:18:42 ago on Mon Jul 17 03:02:34 2023.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-43-218 home]#
```

Below the terminal window, there's a box for the instance ID `i-0578c0ba80b683a5a (TalentNextLinux)` and its IP addresses: `PublicIPs: 43.205.110.69` and `PrivateIPs: 172.31.43.218`. At the bottom, there's a Windows taskbar with the search bar, task view button, and several application icons. The system tray shows the date and time as `08:51 17-07-2023`.

Connect to instance | EC2 ManagexEC2 Instance Connectx

ap-south-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0578c0ba80b683a5a&osUser=ec2-user®ion=ap-south-1&ss...

awsServicesSearch[Alt+S]

MumbaiHarshita

```
[root@ip-172-31-43-218 home]# sudo yum install -y httpd
Last metadata expiration check: 0:21:07 ago on Mon Jul 17 03:02:34 2023.
Dependencies resolved.
```

Package	Architecture	Version	Repository	Size
Installing:				
httpd	x86_64	2.4.56-1.amzn2023	amazonlinux	48 k
Installing dependencies:				
apr	x86_64	1.7.2-2.amzn2023.0.2	amazonlinux	129 k
apr-util	x86_64	1.6.3-1.amzn2023.0.1	amazonlinux	98 k
generic-logos-httpd	noarch	18.0.0-12.amzn2023.0.3	amazonlinux	19 k
httpd-core	x86_64	2.4.56-1.amzn2023	amazonlinux	1.4 M
httpd-filesystem	noarch	2.4.56-1.amzn2023	amazonlinux	15 k
httpd-tools	x86_64	2.4.56-1.amzn2023	amazonlinux	82 k
libbrotli	x86_64	1.0.9-4.amzn2023.0.2	amazonlinux	315 k
mailcap	noarch	2.1.49-3.amzn2023.0.3	amazonlinux	33 k
Installing weak dependencies:				
apr-util-openssl	x86_64	1.6.3-1.amzn2023.0.1	amazonlinux	17 k
mod_http2	x86_64	2.0.11-2.amzn2023	amazonlinux	150 k
mod_lua	x86_64	2.4.56-1.amzn2023	amazonlinux	62 k

```
Transaction Summary
Install 12 Packages
```

i-0578c0ba80b683a5a (TalentNextLinux)

PublicIPs: 43.205.110.69 PrivateIPs: 172.31.43.218

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Connect to instance | EC2 Man... x EC2 Instance Connect x +

ap-south-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0578c0ba80b683a5a&osUser=ec2-user®ion=ap-south-1&...

aws Services Search [Alt+S] Mumbai Harshita

```
[root@ip-172-31-43-218 home]# sudo systemctl start httpd
[root@ip-172-31-43-218 home]# sudo systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-43-218 home]#
```

i-0578c0ba80b683a5a (TalentNextLinux) x

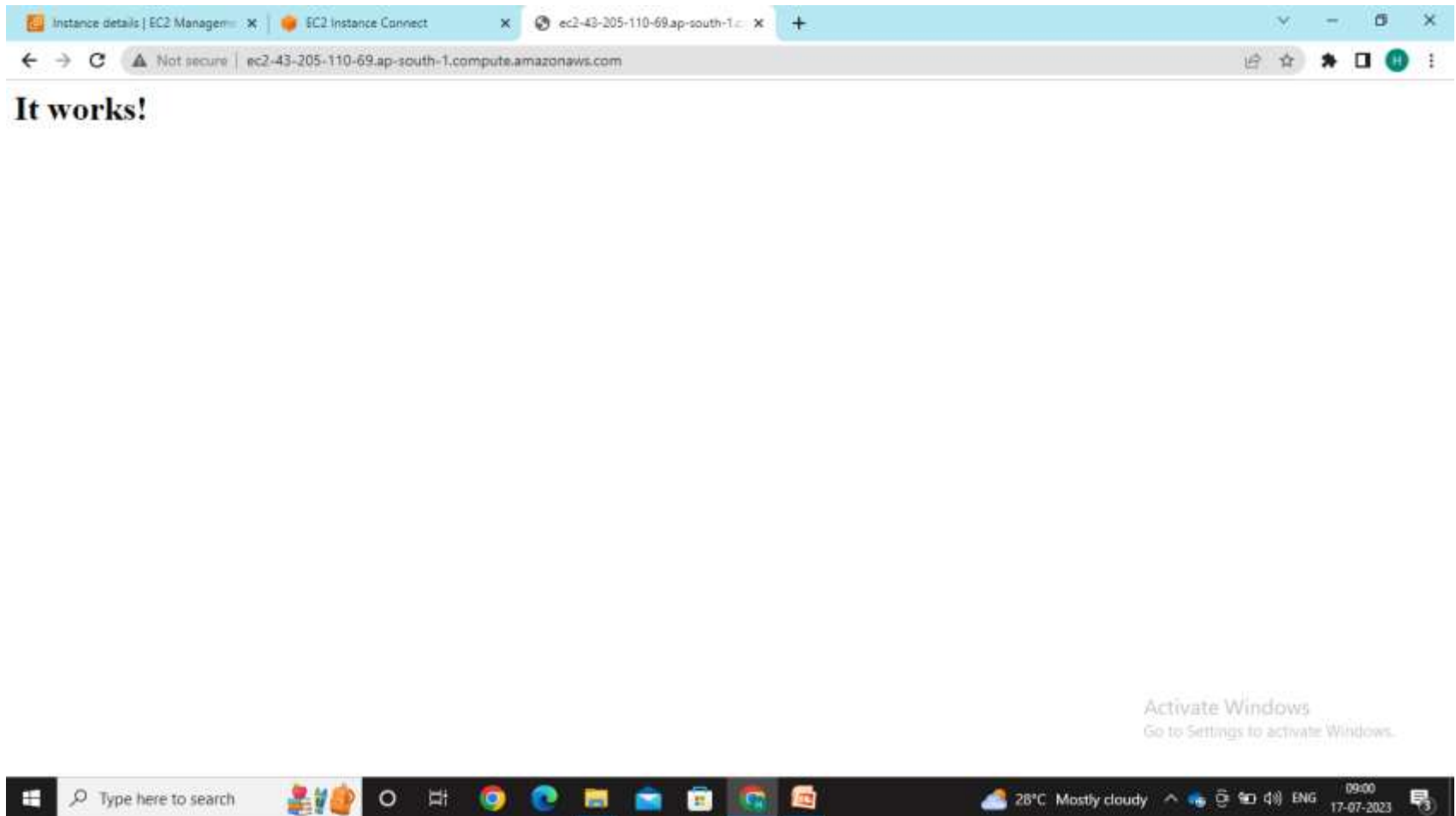
PublicIPs: 43.205.110.69 PrivateIPs: 172.31.43.218

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Type here to search 28°C Mostly cloudy 08:57 17-07-2023

Copy the Public IPv4 DNS or public IP address and paste it to new tab, then default page will be opened as follows



Instance details | EC2 Management Console | EC2 Instance Connect | ec2-43-205-110-69.ap-south-1

ap-south-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0578c0ba80b683a5a&osUser=ec2-user®ion=ap-south-1&...

aws Services Search [Alt+S]

```
[root@ip-172-31-43-218 ~]# sudo systemctl start httpd
[root@ip-172-31-43-218 ~]# sudo systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-43-218 ~]# cd /var/www/html
bash: cd /var/www/html: No such file or directory
[root@ip-172-31-43-218 ~]# cd /var/www/html/
bash: cd /var/www/html/: No such file or directory
[root@ip-172-31-43-218 ~]# cd /var/www/html/
[root@ip-172-31-43-218 ~]# index.html
bash: index.html: command not found
[root@ip-172-31-43-218 ~]# touch index.html
[root@ip-172-31-43-218 ~]# ls
index.html
[root@ip-172-31-43-218 ~]# echo '<h1> This is TalentNextLinux instance' index.html
<h1> This is TalentNextLinux instance index.html
[root@ip-172-31-43-218 ~]# sudo echo '<h1> This is TalentNextLinux instance' index.html
<h1> This is TalentNextLinux instance index.html
[root@ip-172-31-43-218 ~]#
```

i-0578c0ba80b683a5a (TalentNextLinux)
PublicIPs: 43.205.110.69 PrivateIPs: 172.31.43.218

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Instance details | EC2 Management console | EC2 Instance Connect | ec2-43-205-110-69.ap-south-1 | how to save a file in linux commo

ap-south-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0578c0ba80b683a5a&osUser=ec2-user®ion=ap-south-1&...

aws Services Search [Alt+S] Mumbai Harshita

```
[root@ip-172-31-43-218 html]# vi index.html
[root@ip-172-31-43-218 html]# vi index.html
[root@ip-172-31-43-218 html]# sudo echo "<h1> This is TalentNext Linux instance" > index.html
[root@ip-172-31-43-218 html]#
```

i-0578c0ba80b683a5a (TalentNextLinux) PublicIPs: 43.205.110.69 PrivateIPs: 172.31.43.218

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Lastly terminate the instance

