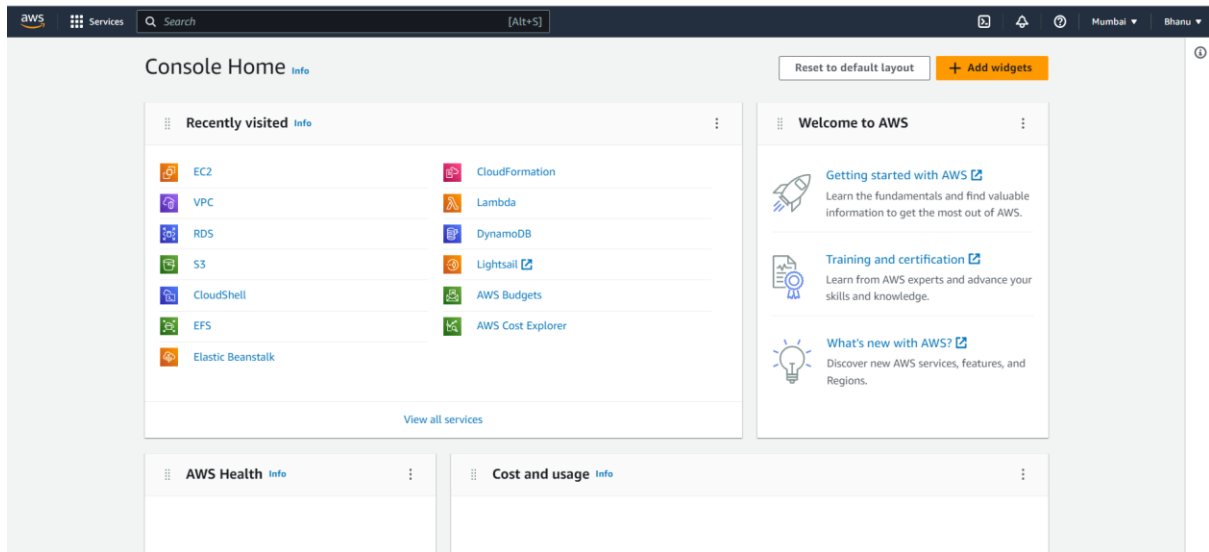
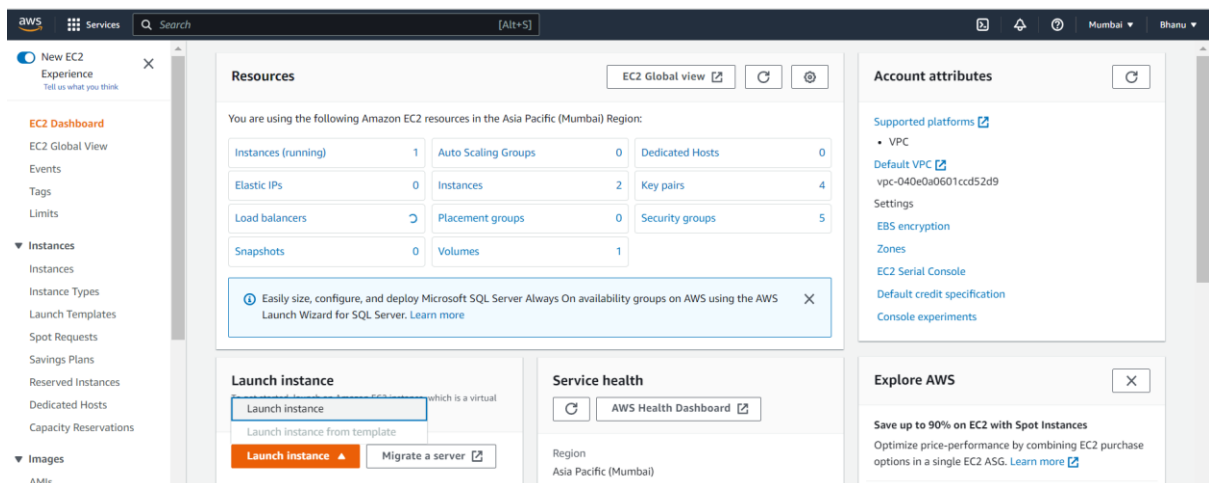


EC2-AWS

*Log in to the console.



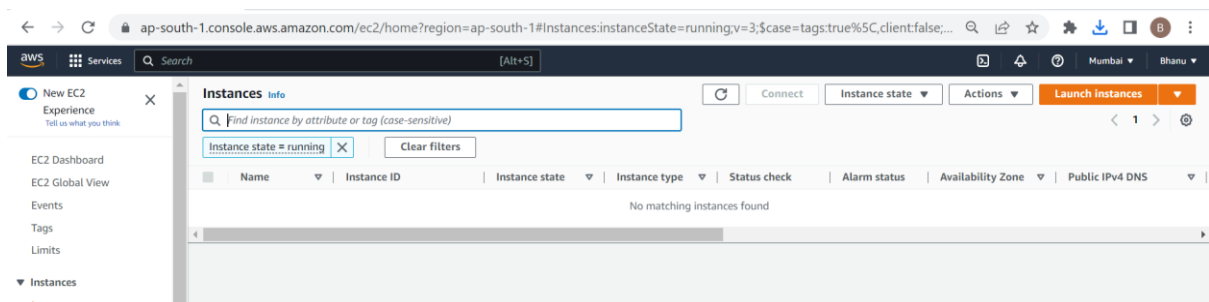
**Open EC2 dashboard,click on the launch instance.



Step1

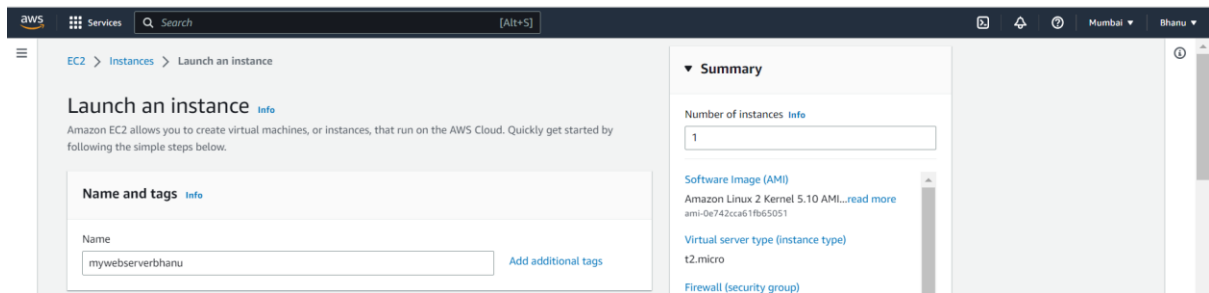
:You can see the EC2 instance launch page.

It shows the instances which are available.Currently we don't have any instances.



Step2:

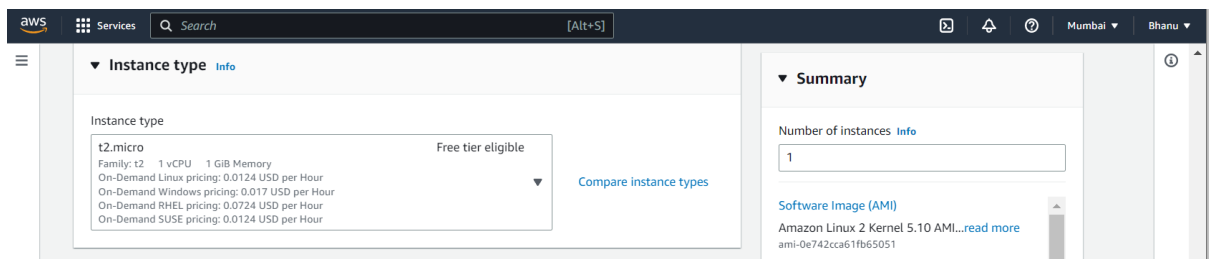
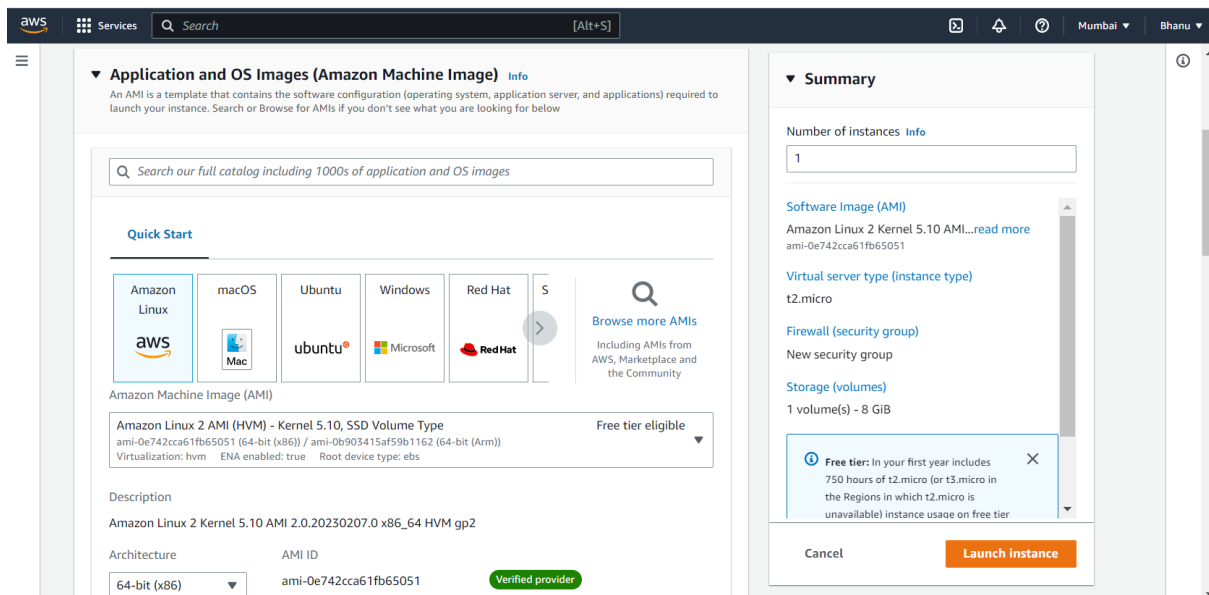
Once you click the launch an instance ,give the name for the instane as mywebserverbhanu



Step3:

Select the amazon machine image.

Select Amazon linux machine image. And the type of instance is t2.micro



Step4

:Create a new key pair.

Give the name for the keypair ,and the .pem file will be downloaded to your local machine.

Create key pair



Key pairs allow you to connect to your instance securely.

Enter the name of the key pair below. When prompted, store the private key in a secure and accessible location on your computer. **You will need it later to connect to your instance.** [Learn more](#)

Key pair name

The name can include upto 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type



RSA

RSA encrypted private and public key pair



ED25519

ED25519 encrypted private and public key pair (Not supported for Windows instances)

Private key file format



.pem

For use with OpenSSH



.ppk

For use with PuTTY

Cancel

Create key pair

The screenshot shows the AWS Management Console interface. At the top, there's a navigation bar with the AWS logo, 'Services', a search bar, and user information. Below this, the 'Key pair (login)' dialog is open. It has a title bar with a dropdown arrow and an 'Info' link. The main content area has a message: '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.' Below this is a form field for 'Key pair name - required' with the text 'mykeypair' and a dropdown arrow. To the right of the field is a circular arrow icon and the text 'Create new key pair'. On the right side of the dialog, there's a 'Summary' section with a title bar. It contains two fields: 'Number of instances' with a value of '1' and an 'Info' link, and 'Software Image (AMI)' with a dropdown arrow.

Step5:

Create a new security group and edit the inbound security rules.

Allow SSH,HTTP,HTTPS traffic.

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

Security group name - *required*

launch-wizard-3

This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and .-:/@[]+=&()!\$*

Description - *required* Info

launch-wizard-3 created 2023-02-27T09:27:07.390Z

Summary

Number of instances Info

1

Software Image (AMI)

Amazon Linux 2 Kernel 5.10 AMI...read more
ami-0e742cca61fb65051

Virtual server type (instance type)

t2.micro

Inbound security groups rules

Security group rule 1 (TCP, 22, 0.0.0.0/0) Remove

Type Info: ssh Protocol Info: TCP Port range Info: 22

Source type Info: Anywhere Source Info: Add CIDR, prefix list or security Description - optional Info: e.g. SSH for admin desktop

0.0.0.0/0 X

Security group rule 2 (TCP, 80, 0.0.0.0/0) Remove

Type Info: HTTP Protocol Info: TCP Port range Info: 80

Source type Info: Anywhere Source Info: Add CIDR, prefix list or security Description - optional Info: e.g. SSH for admin desktop

0.0.0.0/0 X

Security group rule 3 (TCP, 443, 0.0.0.0/0) Remove

Type Info: HTTPS Protocol Info: TCP Port range Info: 443

Source type Info: Anywhere Source Info: Add CIDR, prefix list or security Description - optional Info: e.g. SSH for admin desktop

0.0.0.0/0 X

Summary

Number of instances Info

1

Software Image (AMI)

Amazon Linux 2 Kernel 5.10 AMI...read more
ami-0e742cca61fb65051

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 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

Step6:

EC2 VPC and Subnet selection.

Select the default vpc available in that region.

Network settings Info

VPC - *required* Info

vpc-040e0a0601ccd52d9 (default) Create new VPC

172.31.0.0/16

Subnet Info

No preference Create new subnet

Auto-assign public IP Info

Enable

Summary

Number of instances Info

1

Software Image (AMI)

Amazon Linux 2 Kernel 5.10 AMI...read more
ami-0e742cca61fb65051

Virtual server type (instance type)

t2.micro

Step7:

EC2 EBS volume selection.

allocate 8Gib of storage,you can also give more than that.

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.

Add security group rule

Configure storage Info Advanced

1x 8 GiB gp2 Root volume (Not encrypted)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

Add new volume

0 x File systems Edit

Summary

Number of instances Info: 1

Software Image (AMI): Amazon Linux 2 Kernel 5.10 AMI...read more
ami-0e742cca61fb65051

Virtual server type (instance type): t2.micro

Firewall (security group): New security group

Storage (volumes): 1 volume(s) - 8 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

Step8:

User data insertion page with below command.

Under the advanced settings tab,we can see the user data .Give the following code in the box mentioned.

Metadata response hop limit Info: Select

Allow tags in metadata Info: Select

User data - optional Info: Enter user data in the field.

```
#!/bin/bash
yum update -y
yum install httpd -y
service httpd start
chkconfig httpd on
IP_ADDR=$(curl http://169.254.169.254/latest/meta-data/public-ipv4)
echo "Manual instance with IP $IP_ADDR" > /var/www/html/index.html
```

☐ User data has already been base64 encoded

Summary

Number of instances Info: 1

Software Image (AMI): Amazon Linux 2 Kernel 5.10 AMI...read more
ami-0e742cca61fb65051

Virtual server type (instance type): t2.micro

Firewall (security group): New security group

Storage (volumes): 1 volume(s) - 8 GiB

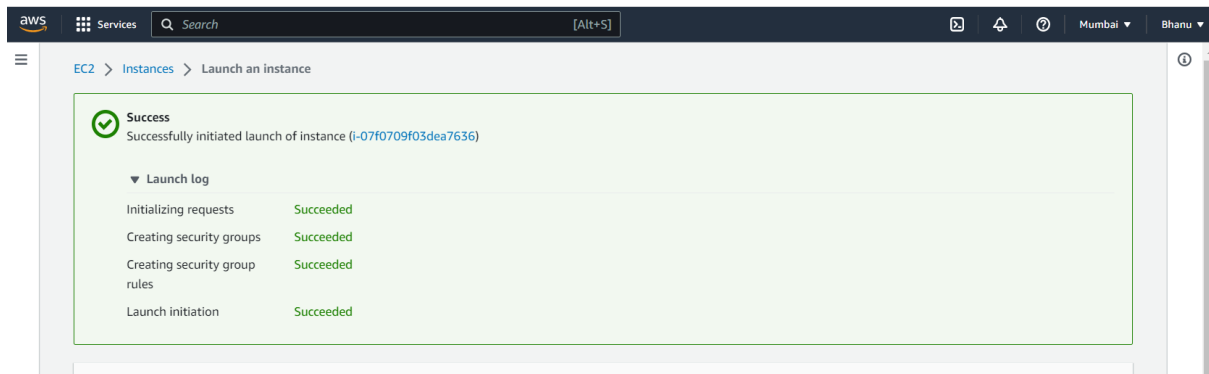
Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier

Cancel Launch instance

Step9:

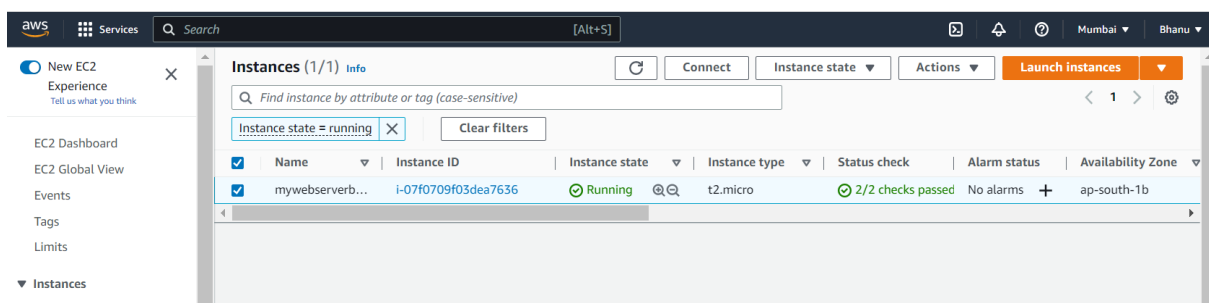
EC2 launch logs

Once you click on launch instance,the security groups,initializes requests,and launches the instance.



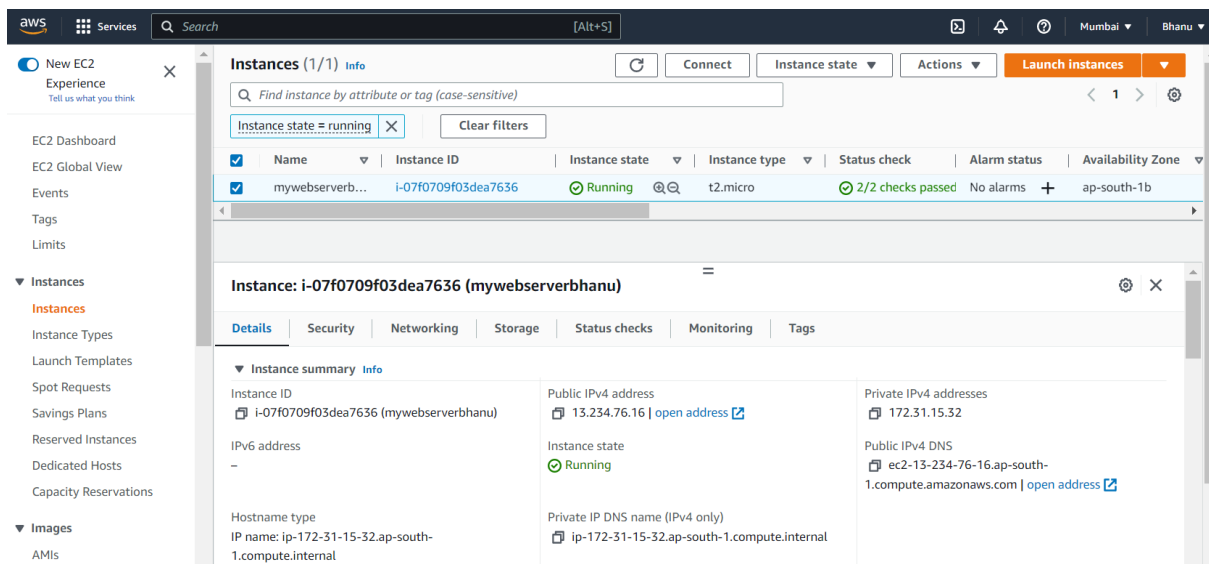
Step 10:

EC2 instance running state.



Step 11:

EC2 summary page with public ip and private ip.



aws

Services

Search

[Alt+S]

Mumbai

Bhanu

New EC2 Experience

EC2 Dashboard

EC2 Global View

Events

Tags

Limits

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

Images

AMIs

AMI Catalog

Instances (1/1) Info

Find instance by attribute or tag (case-sensitive)

Instance state = running

Clear filters

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
mywebserverb...	i-07f0709f03dea7636	Running	t2.micro	2/2 checks passed	No alarms	ap-south-1b

Instance: i-07f0709f03dea7636 (mywebserverbhanu)

Answer private resource DNS name IPv4 (A)

Auto-assigned IP address 13.234.76.16 [Public IP]

IAM Role

Instance type t2.micro

VPC ID vpc-040e0a0601ccd52d9

Subnet ID subnet-08f1d15b1c498ff2f

Elastic IP addresses

AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more

Auto Scaling Group name

Instance details Info

Platform Amazon Linux (Inferred)

AMI ID ami-0e742cca61fb65051

Monitoring disabled

aws

Services

Search

[Alt+S]

Mumbai

Bhanu

New EC2 Experience

EC2 Dashboard

EC2 Global View

Events

Tags

Limits

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

Images

AMIs

AMI Catalog

Instances (1/1) Info

Find instance by attribute or tag (case-sensitive)

Instance state = running

Clear filters

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
mywebserverb...	i-07f0709f03dea7636	Running	t2.micro	2/2 checks passed	No alarms	ap-south-1b

Instance: i-07f0709f03dea7636 (mywebserverbhanu)

Platform details Linux/UNIX

Stop protection Disabled

Instance auto-recovery Default

AMI Launch index 0

Credit specification standard

AMI name amzn2-ami-kernel-5.10-hvm-2.0.20230207.0-x86_64-gp2

Launch time Mon Feb 27 2023 15:05:39 GMT+0530 (India Standard Time) (4 minutes)

Lifecycle normal

Key pair name mykeypair

Kernel ID

Termination protection Disabled

AMI location amazon/amzn2-ami-kernel-5.10-hvm-2.0.20230207.0-x86_64-gp2

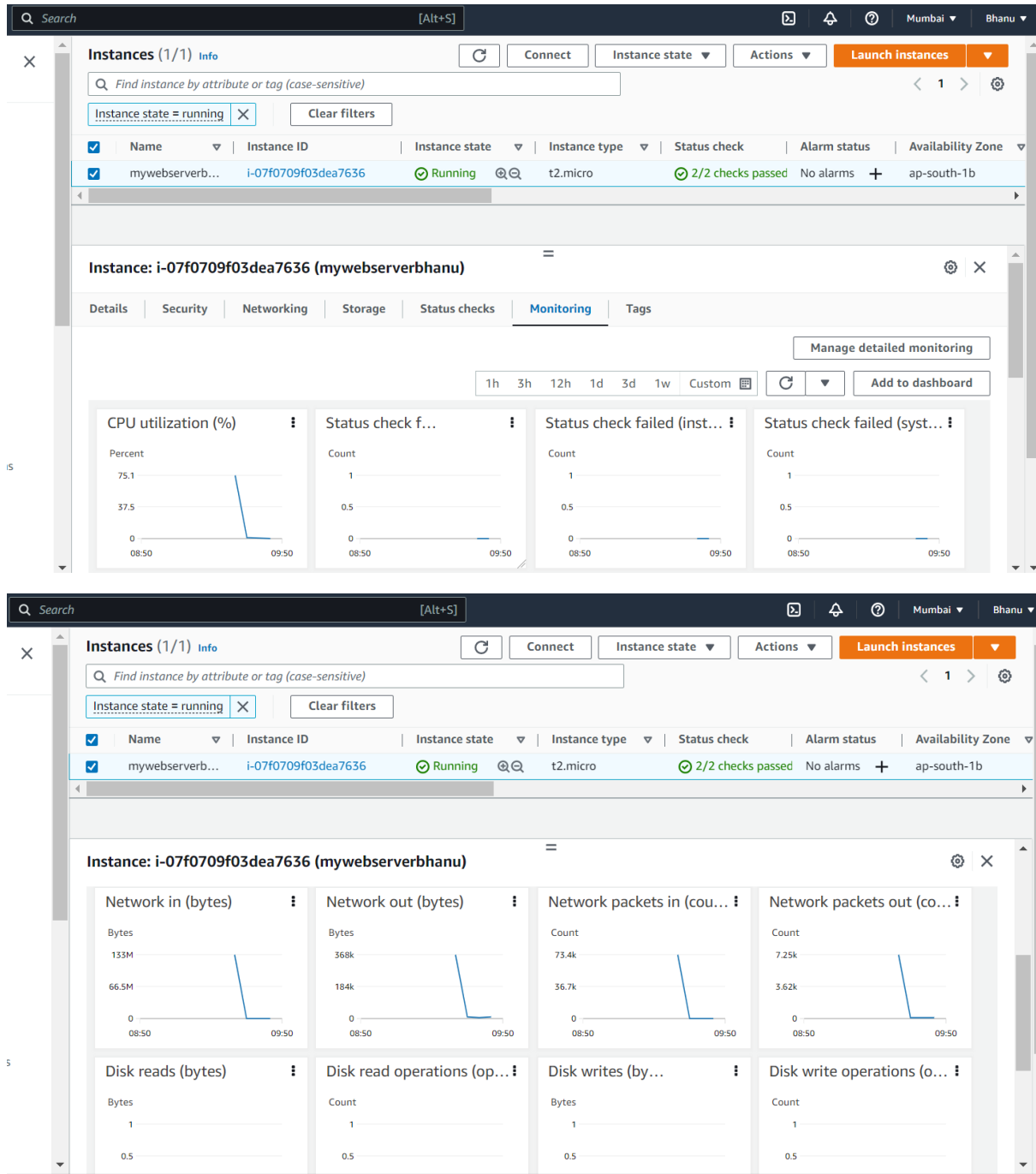
Stop-hibernate behavior disabled

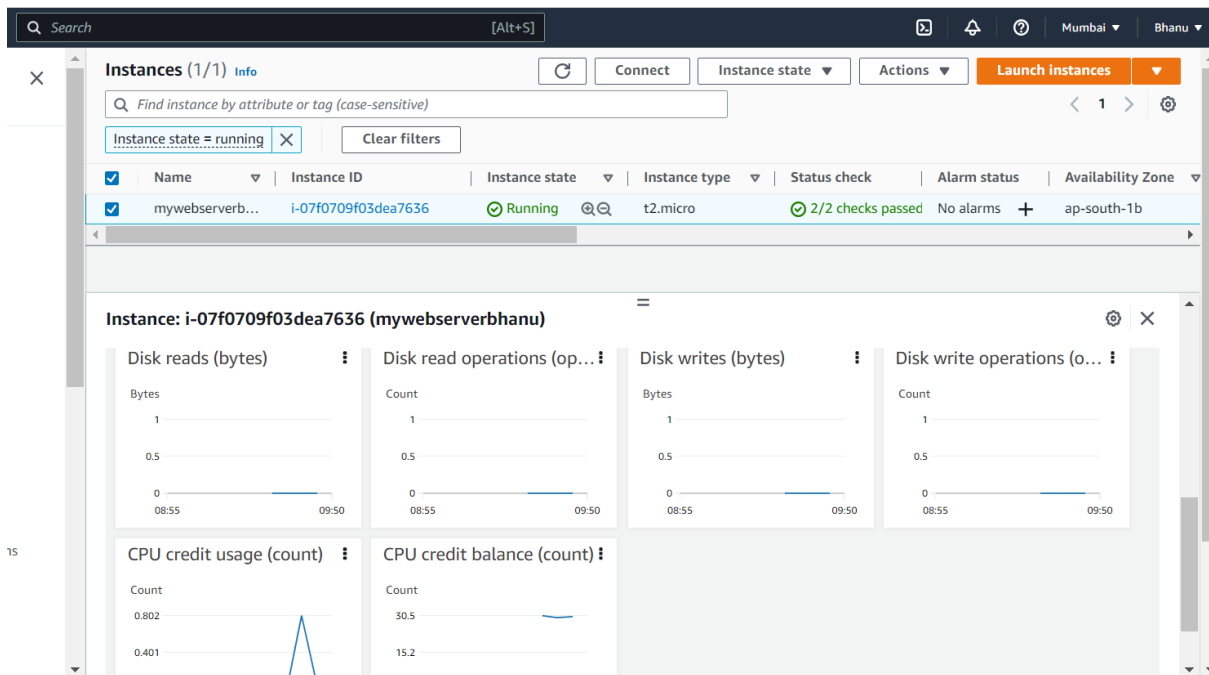
State transition reason

State transition message

Step 12:

EC2 monitoring page





Step 13:

SSH Access of EC2 instance in local machine.

```
root@ip-172-31-15-32:/var/www/html

C:\Users\DELL\Downloads>ssh -i "mykeypair.pem" ec2-user@ec2-13-234-76-16.ap-south-1.compute.amazonaws.com
Last login: Mon Feb 27 09:43:43 2023 from 157.48.235.6

 _ _ _ _ _
| | | | |
|_|_|_|_|_|

Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-15-32 ~]$ sudo su
[root@ip-172-31-15-32 ec2-user]# cd ..
[root@ip-172-31-15-32 home]# ls
ec2-user
[root@ip-172-31-15-32 home]# ls -la
total 0
drwxr-xr-x 3 root root 22 Feb 27 09:36 .
dr-xr-xr-x 18 root root 257 Feb 27 09:36 ..
drwx----- 3 ec2-user ec2-user 74 Feb 27 09:36 ec2-user
[root@ip-172-31-15-32 home]# cd ..
[root@ip-172-31-15-32 /]# ls -la
total 16
dr-xr-xr-x 18 root root 257 Feb 27 09:36 .
dr-xr-xr-x 18 root root 257 Feb 27 09:36 ..
-rw-r--r-- 1 root root 0 Feb 27 09:36 .autorelabel
lrwxrwxrwx 1 root root 7 Feb 8 21:50 bin -> usr/bin
dr-xr-xr-x 4 root root 4096 Feb 27 09:36 boot
drwxr-xr-x 15 root root 2900 Feb 27 09:36 dev
drwxr-xr-x 82 root root 8192 Feb 27 09:36 etc
drwxr-xr-x 3 root root 22 Feb 27 09:36 home
lrwxrwxrwx 1 root root 7 Feb 8 21:50 lib -> usr/lib
lrwxrwxrwx 1 root root 9 Feb 8 21:50 lib64 -> usr/lib64
drwxr-xr-x 2 root root 6 Feb 8 21:49 local
drwxr-xr-x 2 root root 6 Apr 9 2019 media
drwxr-xr-x 2 root root 6 Apr 9 2019 mnt
drwxr-xr-x 4 root root 27 Feb 8 21:51 opt
dr-xr-xr-x 173 root root 0 Feb 27 09:35 proc
dr-xr-x-- 3 root root 103 Feb 27 09:36 root
drwxr-xr-x 29 root root 1000 Feb 27 09:41 run
lrwxrwxrwx 1 root root 8 Feb 8 21:50 sbin -> usr/sbin
drwxr-xr-x 2 root root 6 Apr 9 2019 srv
dr-xr-xr-x 13 root root 0 Feb 27 09:35 sys
```

Step 14:

Browsing EC2 instance in the Browser Local Machine.

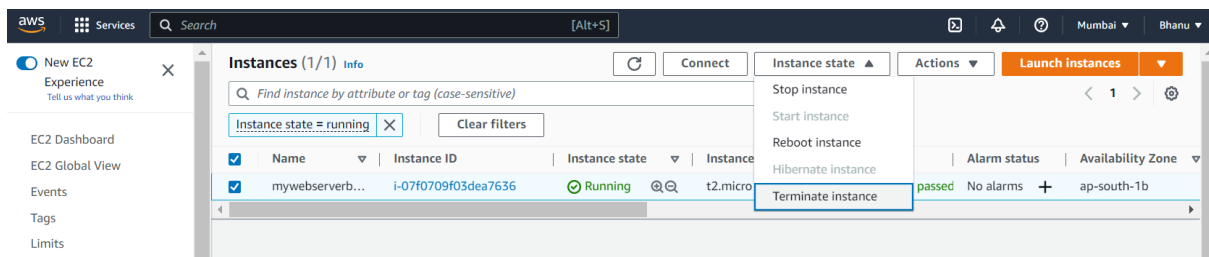
Copy the public ip address in browser and it shows the following output.



Step 15:

Terminating the resource.

Select the instance, under the instance state click on terminate instance.



*Click on terminate. Then the resource will be terminated.

