

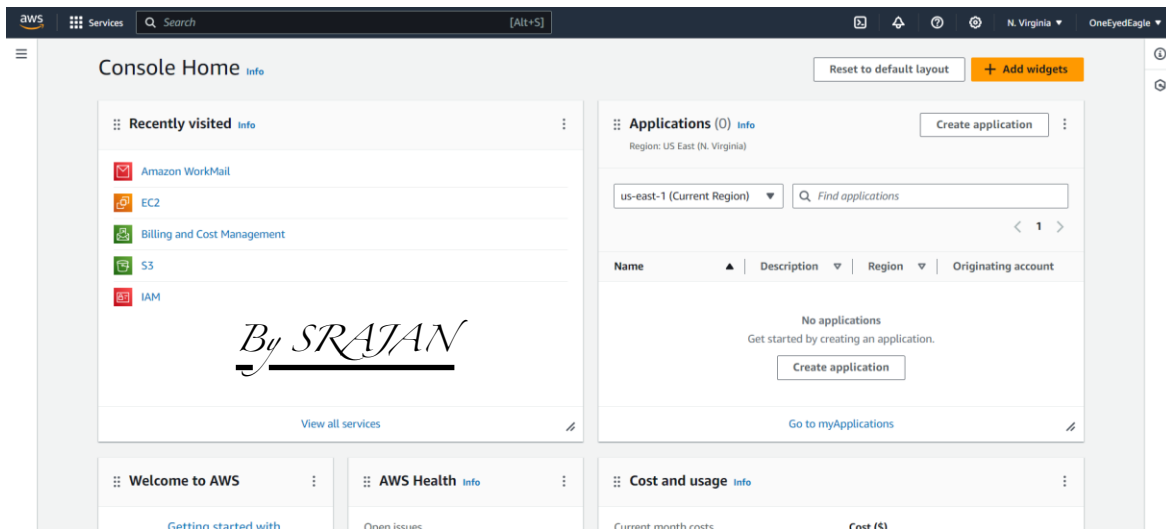
## ASSIGNMENT -> 14

### PROBLEM STATEMENT ->

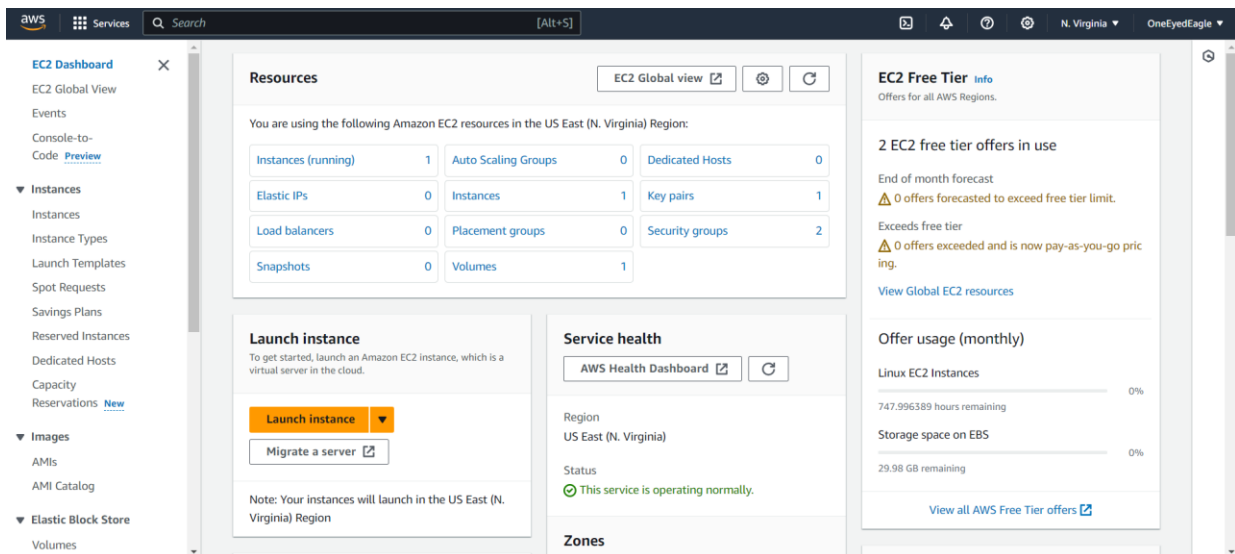
Create an Elastic IP for an Instance.

### To Create Elastic IP for an Instance ->

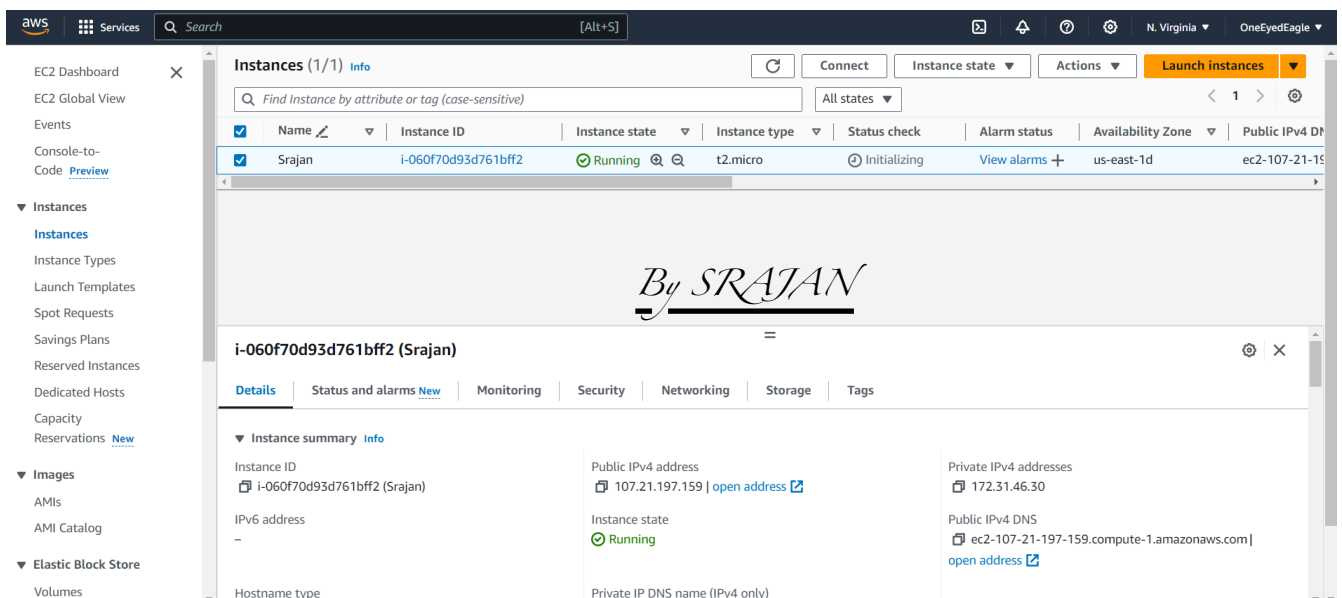
STEP 1-> Go to EC2.



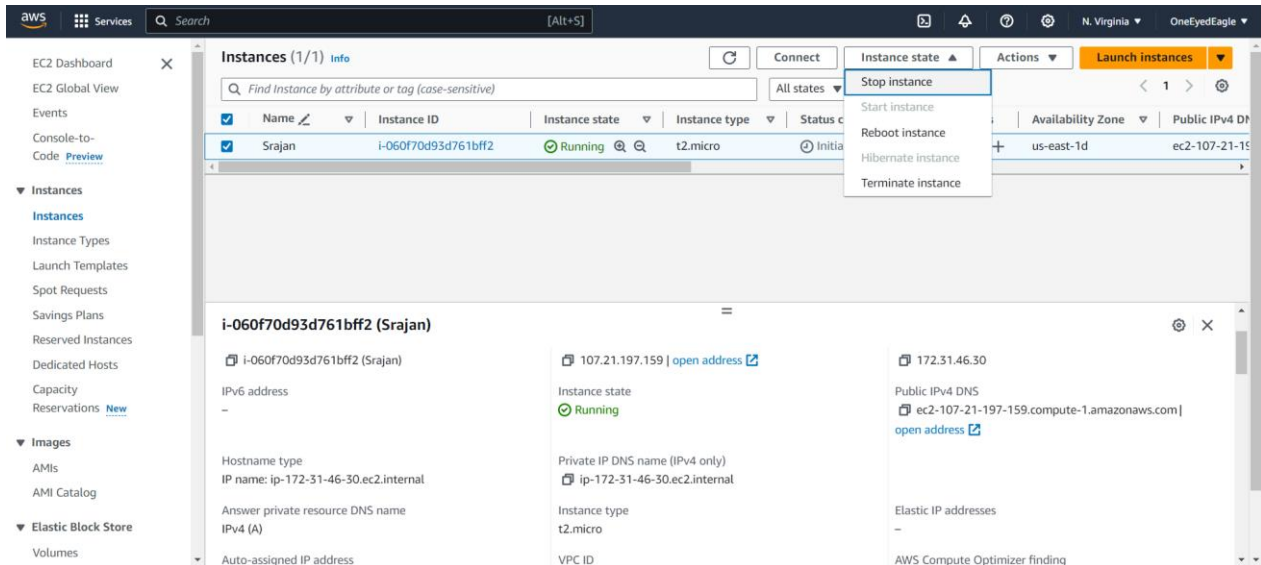
STEP 2-> Go to Instances.



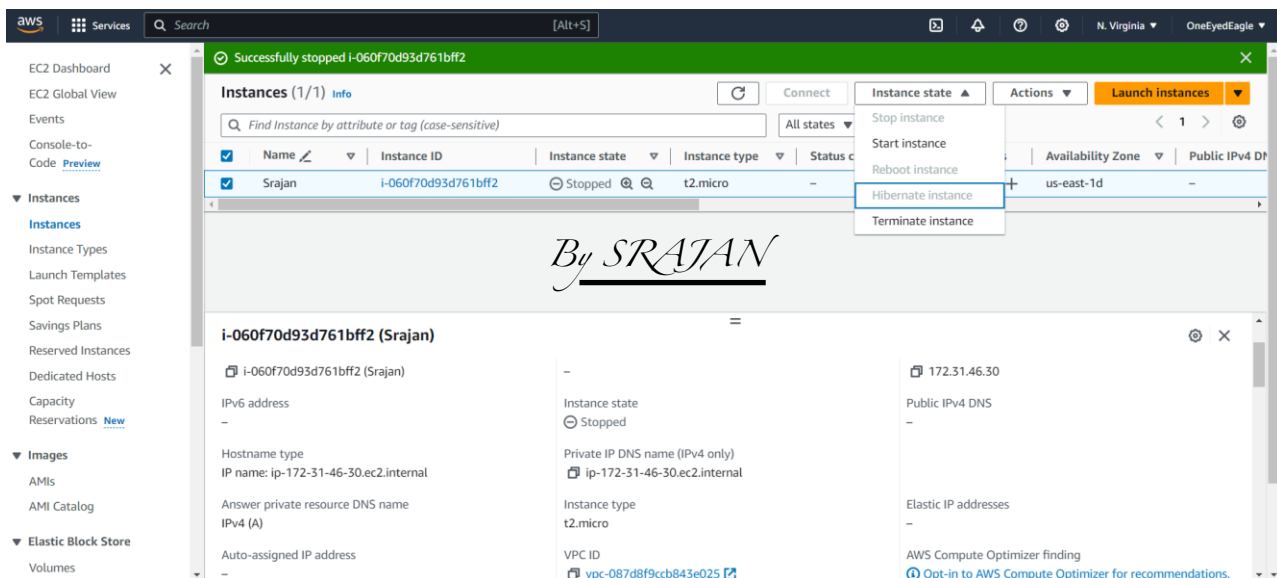
STEP 3-> Select an instance and save its Public IPv4 address.



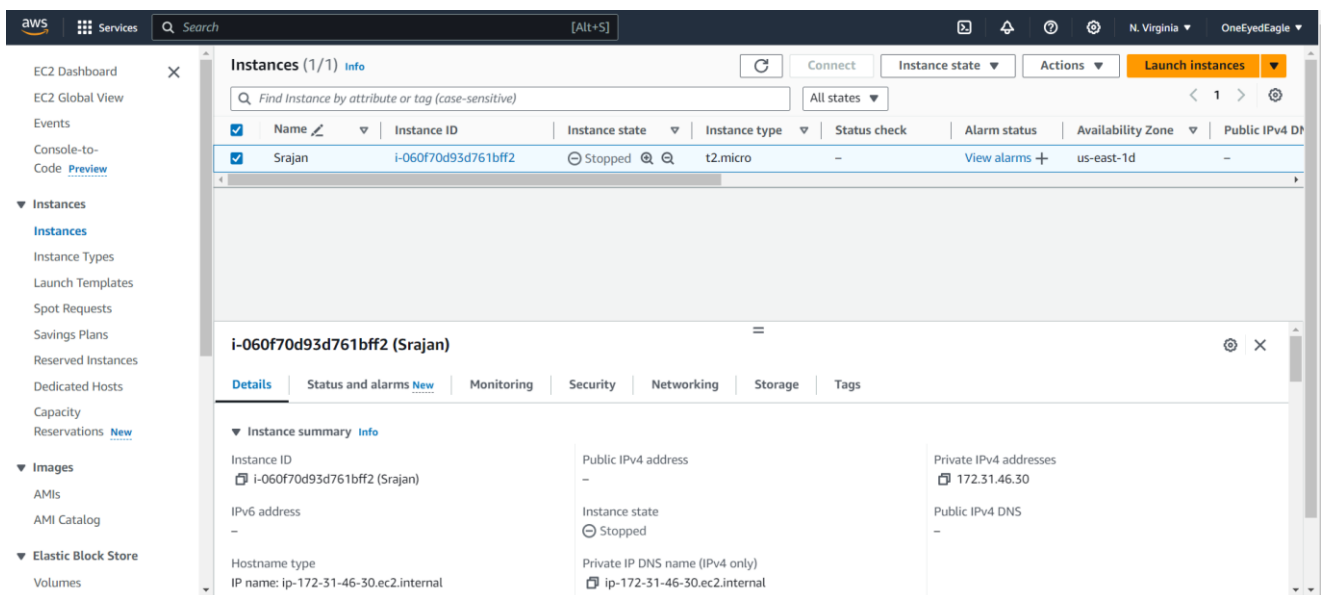
## STEP 4-> Stop the Instance from Stop Instance option.



## STEP 5-> Select the Start Instance option to again activate the instance.



## STEP 6-> Now again save the Public IPv4 address compare it with the previous IP.



## STEP 7-> Go to the Elastic IPs option.

**Resources**

You are using the following Amazon EC2 resources in the US East (N. Virginia) Region:

Instances (running)	0	Auto Scaling Groups	0	Dedicated Hosts	0
Elastic IPs	0	Instances	1	Key pairs	1
Load balancers	0	Placement groups	0	Security groups	2
Snapshots	0	Volumes	1		

**Launch instance**

To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.

[Launch instance](#)

[Migrate a server](#)

Note: Your instances will launch in the US East (N. Virginia) Region

**Service health**

[AWS Health Dashboard](#)

Region  
US East (N. Virginia)

Status  
This service is operating normally.

**Zones**

**EC2 Free Tier**

Offers for all AWS Regions.

2 EC2 free tier offers in use

End of month forecast  
0 offers forecasted to exceed free tier limit.

Exceeds free tier  
0 offers exceeded and is now pay-as-you-go pricing.

[View Global EC2 resources](#)

**Offer usage (monthly)**

Linux EC2 Instances  
744.976667 hours remaining 1%

Storage space on EBS  
29.96 GB remaining 0%

[View all AWS Free Tier offers](#)

## STEP 8-> Click on Allocate Elastic IP button.

**Elastic IP addresses**

[Find resources by attribute or tag](#)

[Allocate Elastic IP address](#)

< 1 >

Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record
No Elastic IP addresses found in this Region				

*By SRAJAN*

[View IP address usage and recommendations to release unused IPs with Public IP insights](#)

**STEP 9->** Click on “Allocate”.

Network border group [Info](#)

us-east-1

Public IPv4 address pool

- ☒ Amazon's pool of IPv4 addresses
- ☐ Public IPv4 address that you bring to your AWS account with BYOIP. (option disabled because no pools found) [Learn more](#)
- ☐ Customer-owned pool of IPv4 addresses created from your on-premises network for use with an Outpost. (option disabled because no customer owned pools found) [Learn more](#)

Global static IP addresses

AWS Global Accelerator can provide global static IP addresses that are announced worldwide using anycast from AWS edge locations. This can help improve the availability and latency for your user traffic by using the Amazon global network. [Learn more](#)

Create accelerator

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.

No tags associated with the resource.

Add new tag

You can add up to 50 more tag

Cancel Allocate

**STEP 10->** The Elastic IP has been created. Click on the IP to open it.

Elastic IP addresses (1)

Find resources by attribute or tag

Public IPv4 address : 34.230.168.249

Clear filters

Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record
-	34.230.168.249	Public IP	eipalloc-00ac810026be2c4df	-

View IP address usage and recommendations to release unused IPs with [Public IP insights](#)

**STEP 11->** Click on Associate Elastic IP Address.

34.230.168.249

Associate Elastic IP address

Summary

Allocated IPv4 address	Type	Allocation ID	Reverse DNS record
34.230.168.249	Public IP	eipalloc-00ac810026be2c4df	-
Association ID	Scope	Associated instance ID	Private IP address
-	VPC	-	-
Network interface ID	Network interface owner account ID	Public DNS	NAT Gateway ID
-	-	-	-
Address pool	Network border group		
Amazon	us-east-1		

Tags(0)

Manage tags

**STEP 12**-> With resource type selected as “Instance”, select the name of the instance & its private IP address. Check the bottom checkbox to reassociate the Elastic IP. Then click on “Associate”.

The screenshot shows the AWS console page for associating an Elastic IP address. At the top, it says "Elastic IP address: 34.230.168.249". Under "Resource type", "Instance" is selected. A yellow warning box states: "If you associate an Elastic IP address with an instance that already has an Elastic IP address associated, the previously associated Elastic IP address will be disassociated, but the address will still be allocated to your account. Learn more". Below this, the "Instance" field contains "i-060f70d93d761bff2" and the "Private IP address" field contains "172.31.46.30". The "Reassociation" section has a checked checkbox "Allow this Elastic IP address to be reassociated". At the bottom are "Cancel" and "Associate" buttons.

**STEP 13**-> Now again save the Public IPv4 address, then stop the instance.

The screenshot shows the AWS console with a green notification bar at the top stating "Successfully started i-060f70d93d761bff2". The "Instances" table shows one instance, "Srajan", with ID "i-060f70d93d761bff2", in a "Running" state. Below the table, the details for "i-060f70d93d761bff2 (Srajan)" are shown. The "Instance summary" includes the Instance ID, IPv6 address, and Hostname type. The "Public IPv4 address" is "34.230.168.249" with a link to "open address". The "Private IPv4 addresses" is "172.31.46.30". The "Instance state" is "Running". The "Public IPv4 DNS" is "ec2-34-230-168-249.compute-1.amazonaws.com" with a link to "open address". The "Private IP DNS name (IPv4 only)" is also shown.

**STEP 14**-> Restart the instance.

The screenshot shows the AWS console with a green notification bar at the top stating "Successfully stopped i-060f70d93d761bff2". The "Instances" table shows one instance, "Srajan", with ID "i-060f70d93d761bff2", in a "Stopped" state. Below the table, the details for "i-060f70d93d761bff2 (Srajan)" are shown. The "Instance summary" includes the Instance ID, IPv6 address, and Hostname type. The "Public IPv4 address" is "34.230.168.249" with a link to "open address". The "Private IPv4 addresses" is "172.31.46.30". The "Instance state" is "Stopped". The "Public IPv4 DNS" is "ec2-34-230-168-249.compute-1.amazonaws.com" with a link to "open address". The "Private IP DNS name (IPv4 only)" is also shown.

**STEP 15**-> After restarting, again save the IP address and compare it with the previous one.

The screenshot displays the AWS Management Console interface. On the left, the navigation menu includes 'EC2 Dashboard', 'EC2 Global View', 'Events', 'Console-to-Code', and 'Instances'. The 'Instances' section is expanded, showing a list of instances. The instance 'Srajan' with ID 'i-060f70d93d761bff2' is highlighted. The instance state is 'Running', and the instance type is 't2.micro'. The status check shows 'Initializing'. The availability zone is 'us-east-1d'. The public IP address is '34.230.168.249'. The details view for the instance 'i-060f70d93d761bff2 (Srajan)' is shown, with the 'Details' tab selected. The instance summary shows the instance ID, public IPv4 address, private IPv4 addresses, public IPv4 DNS, and private IP DNS name.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP
Srajan	i-060f70d93d761bff2	Running	t2.micro	Initializing	View alarms +	us-east-1d	ec2-34-

*By SRAJAN*

**i-060f70d93d761bff2 (Srajan)**

**Details** | Status and alarms New | Monitoring | Security | Networking | Storage | Tags

**▼ Instance summary Info**

Instance ID i-060f70d93d761bff2 (Srajan)	Public IPv4 address 34.230.168.249   <a href="#">open address</a>	Private IPv4 addresses 172.31.46.30
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-34-230-168-249.compute-1.amazonaws.com   <a href="#">open address</a>
Hostname type -	Private IP DNS name (IPv4 only) -	

**STEP 16**-> Now it is observed that the IP Address does not change.