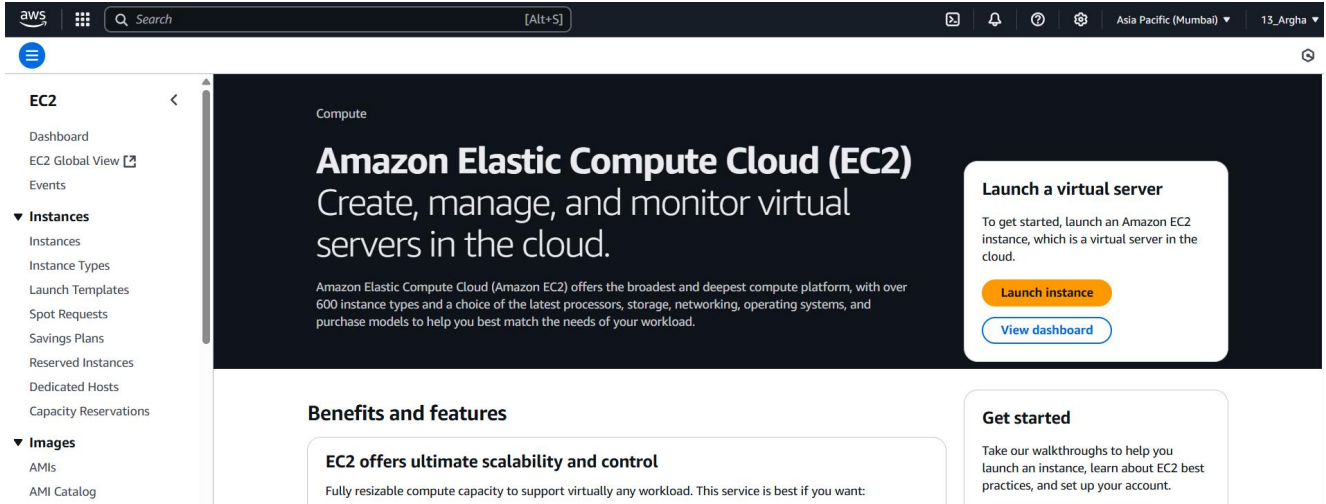


Assignment 15

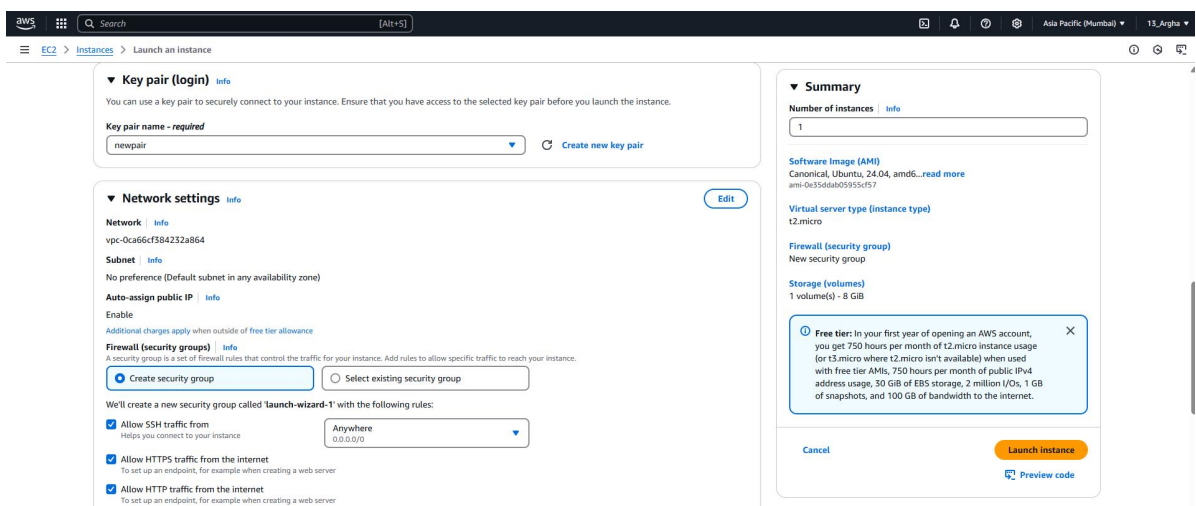
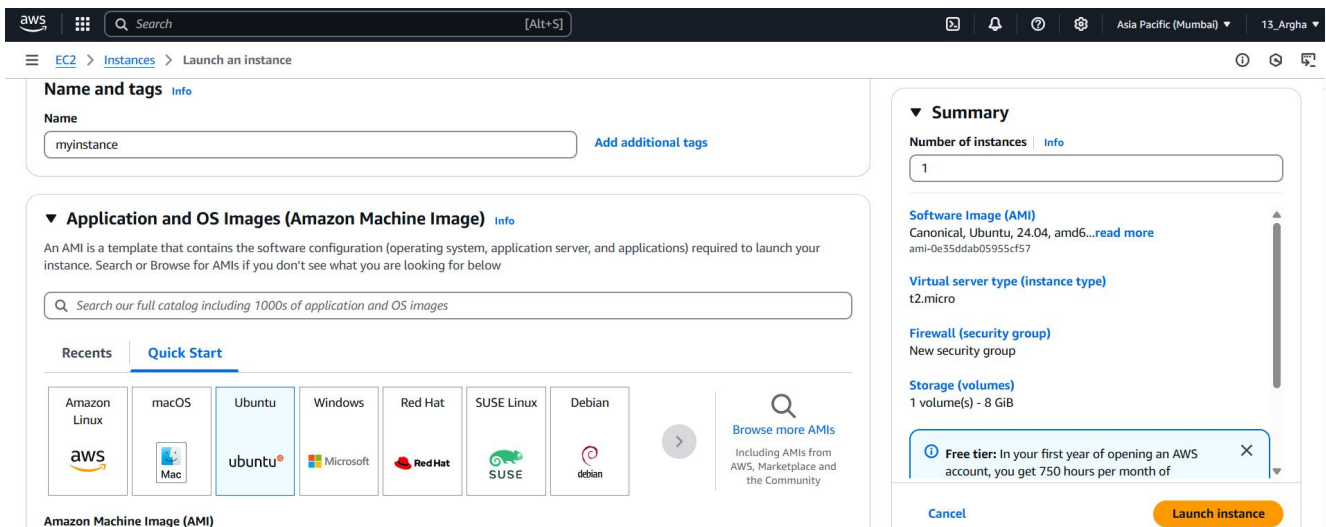
Title → Create a Serverless computing service.

To create a Serverless Computing Services we have to follow some steps.

Step 1 → Login to the account first. Then at the top left corner of AWS Management Console search EC2 and click on that. click on Launch Instance.



Step 2 → Then give the name of the instance and quick start as Ubuntu and select key pairs . after that in Network settings click on Create security group and check all the groups .then Launch Instance.



Step 3 → Then goto Bitwise Client give the host ip, username , initial method ,and client key the click on login . after that click on terminal. OR Connect the instance you created.

Connect to instance [Info](#)

Connect to your instance i-02cb5a9ab8cc52f2c (myinstance) using any of these options

EC2 Instance Connect Session Manager SSH client EC2 serial console

Instance ID
i-02cb5a9ab8cc52f2c (myinstance)

Connection Type

☒ Connect using EC2 Instance Connect
Connect using the EC2 Instance Connect browser-based client, with a public IPv4 or IPv6 address.

☐ Connect using EC2 Instance Connect Endpoint
Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

☒ Public IPv4 address
13.234.67.121

☐ IPv6 address
-

Username
Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ubuntu.
ubuntu

Note: In most cases, the default username, ubuntu, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel Connect

Step 4 → Write the commands in terminal

- Sudo apt-get update
- Sudo apt-get upgrade
- Sudo apt-get install -y nginx

```
ubuntu@ip-172-31-2-138:~$ sudo apt-get update
Hit:1 http://ap-south-1-ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://ap-south-1-ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://ap-south-1-ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Hit:4 https://deb.nodesource.com/node_18.x nodistro InRelease
Hit:5 http://security.ubuntu.com/ubuntu noble-security InRelease
Reading package lists... Done

ubuntu@ip-172-31-2-138:~$ sudo apt-get upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following upgrades have been deferred due to phasing:
  python3-software-properties software-properties-common
The following packages have been kept back:
  linux-aws linux-headers-aws linux-image-aws
The following packages will be upgraded:
  apport apport-core-dump-handler cloud-init landscape-common libdw1t64 libelf1t64 libexpat1
  liblzma5 libnss-systemd libpam-systemd libplymouth5 libsystemd-shared libsystemd0 libudev1
  libxslt1.1 linux-base linux-tools-common openssh-client openssh-server openssh-sftp-server
0 upgraded, 0 newly installed, 0 to remove and 5 not upgraded.

ubuntu@ip-172-31-2-138:~$ sudo apt-get install -y nginx
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
nginx is already the newest version (1.24.0-2ubuntu7.3).
0 upgraded, 0 newly installed, 0 to remove and 5 not upgraded.
```

Step 5 → Then goto browser and search the ip and it shows the output.



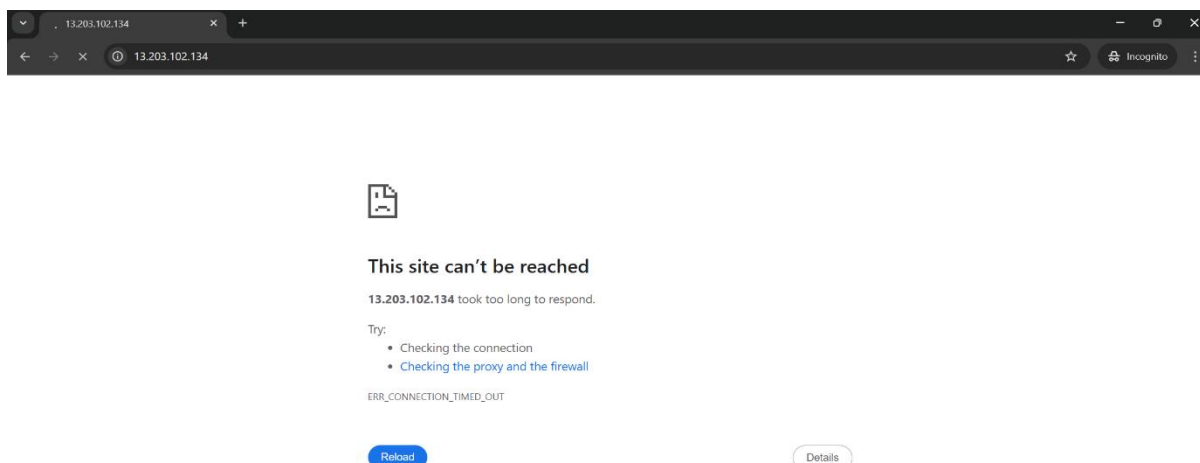
Step 6 → After that stop the instance and then start it again

The first screenshot shows the AWS Management Console for the 'Instances' page. The instance 'myinstance' (ID: i-02cb5a9ab8cc52f2c) is in a 'Stopped' state. The second screenshot shows the same instance in a 'Running' state, with the 'Status check' column indicating 'Initializing'.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public
myinstance	i-02cb5a9ab8cc52f2c	Stopped	t2.micro	-	View alarms +	ap-south-1b	-	-

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public
myinstance	i-02cb5a9ab8cc52f2c	Running	t2.micro	Initializing	View alarms +	ap-south-1b	ec2-13-203-203-203.ap...	13.203

>>> After that you can see that page did not response.



Step 7 → Then goto Instance and in the left side click on Elastic Ips

The screenshot shows the AWS Management Console for the 'Instances' page. The instance 'myinstance' (ID: i-02cb5a9ab8cc52f2c) is in a 'Running' state. The left sidebar shows the 'Elastic Block Store' and 'Network & Security' sections. The 'Elastic Block Store' section is expanded, showing 'Volumes', 'Snapshots', and 'Lifecycle Manager'. The 'Network & Security' section is also expanded, showing 'Security Groups', 'Elastic IPs', 'Placement Groups', 'Key Pairs', and 'Network Interfaces'.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public
myinstance	i-02cb5a9ab8cc52f2c	Running	t2.micro	Initializing	View alarms +	ap-south-1b	ec2-13-203-203-203.ap...	13.203

>>> Click on Allocate Elastic IP address and allocate.

The screenshot shows the AWS Elastic IP addresses console. The left sidebar contains navigation links for EC2, Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, and Capacity Reservations. The main content area is titled 'Elastic IP addresses' and includes a search bar and a table with columns: Name, Allocated IPv4 address, Type, Allocation ID, Reverse DNS record, and Associated instance ID. A message states 'No Elastic IP addresses found in this Region'. Below the table, there are sections for 'Amazon's pool of IPv4 addresses' (with options for Public IPv4, Customer-owned, and Allocate using an IPv4 IPAM pool), 'Network border group' (with a dropdown set to 'ap-south-1'), 'Global static IP addresses' (with a 'Create accelerator' button), and 'Tags - optional' (with an 'Add new tag' button). At the bottom right, there are 'Cancel' and 'Allocate' buttons.

Step 8 → Click on the ip and click on Associate Elastic ip and click on Associate.

The screenshot shows the details page for the Elastic IP address 43.205.47.243. The left sidebar is the same as the previous screenshot. The main content area is titled '43.205.47.243' and includes a 'Summary' section with the following details: Allocated IPv4 address (43.205.47.243), Association ID (-), Network interface ID (-), Address pool (Amazon), Type (Public IP), Scope (VPC), Network interface owner account ID (-), Network border group (ap-south-1), Allocation ID (eipalloc-013f3cde04c8056c7), Associated instance ID (-), Public DNS (-), Reverse DNS record (-), Private IP address (-), and NAT Gateway ID (-). Below the summary, there is a 'Tags(0)' section with a 'Manage tags' button. At the bottom right, there are 'Cancel' and 'Associate Elastic IP address' buttons.

aws [Search] [Alt+S] Asia Pacific (Mumbai) 13_Argha

EC2 > Elastic IP addresses > 43.205.47.243 > Associate Elastic IP address

Associate Elastic IP address

Choose the instance or network interface to associate to this Elastic IP address (43.205.47.243)

Elastic IP address: 43.205.47.243

Resource type
Choose the type of resource with which to associate the Elastic IP address.

☒ Instance
☐ Network interface

⚠ 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](#)

If no private IP address is specified, the Elastic IP address will be associated with the primary private IP address.

Instance
i-02cb5a9ab8cc52f2c

Private IP address
The private IP address with which to associate the Elastic IP address.
Choose a private IP address

Reassociation
Specify whether the Elastic IP address can be reassociated with a different resource if it already associated with a resource.
☐ Allow this Elastic IP address to be reassociated

Cancel Associate

aws [Search] [Alt+S] Asia Pacific (Mumbai) 13_Argha

EC2 > Elastic IP addresses > 43.205.47.243

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
 - Volumes
 - Snapshots

✓ Elastic IP address associated successfully.
Elastic IP address 43.205.47.243 has been associated with instance i-02cb5a9ab8cc52f2c

43.205.47.243 Actions Associate Elastic IP address

Summary

Allocated IPv4 address 43.205.47.243 Association ID eipassoc-07343cb5ced2cee3e Network interface ID eni-0396cb4e51262f0b4	Type Public IP Scope VPC Network interface owner account ID 194722440244 Network border group ap-south-1	Allocation ID eipalloc-013f3cde04c8056c7 Associated instance ID i-02cb5a9ab8cc52f2c Public DNS ec2-43-205-47-243.ap-south-1.compute.amazonaws.com	Reverse DNS record - Private IP address 172.31.4.126 NAT Gateway ID -
---	---	---	---

Address pool
Amazon

Tags(0) Manage tags

Key	Value
-----	-------

>>> Copy the ip and open in a Browser. and now after stopping and restarting the ip will remain unchanged.

