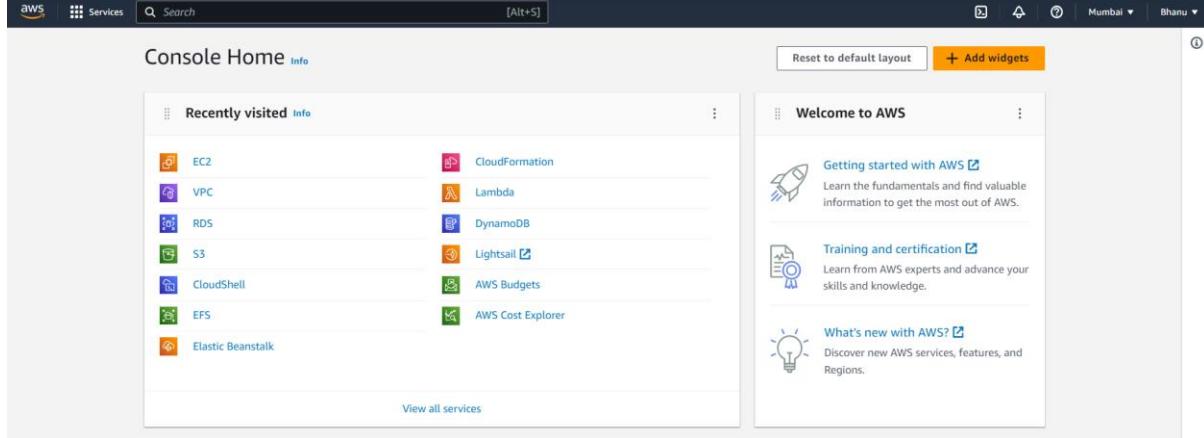


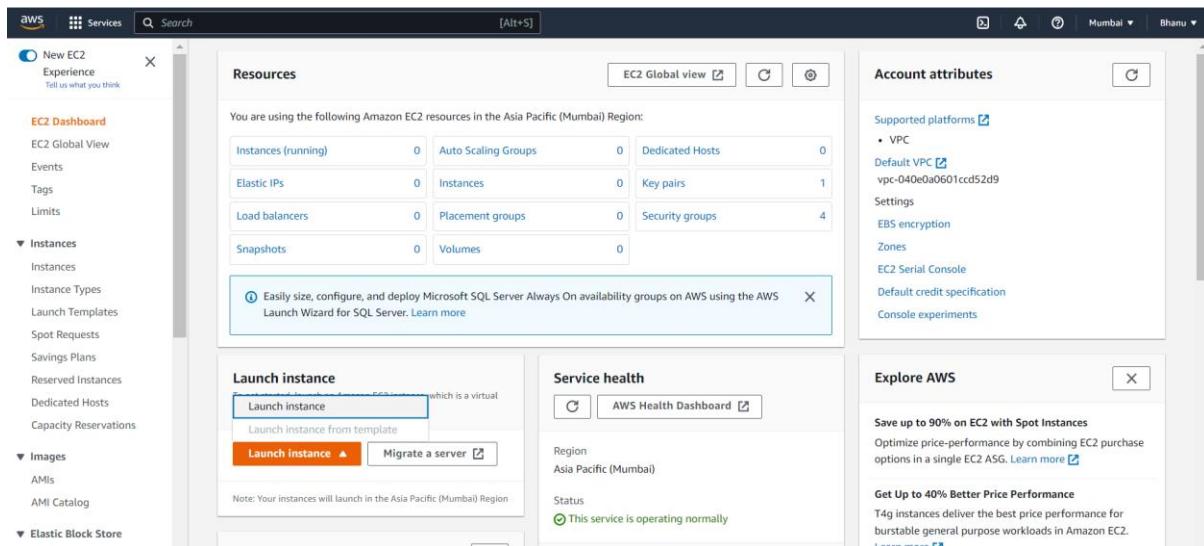
Practice Assignment on Amazon AWS

Create an ec2 instance with the ubuntu operating system, set all the required parameters such as security groups and key pair, and also do SSH with git bash to the running instance.
Also, install NodeJS on top of the instance and check for the version of node to cross-check if NodeJS is installed successfully.

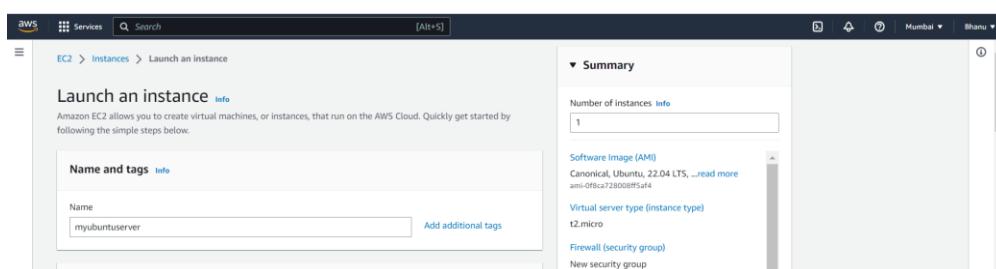
**Login to the AWS management console.



Step1:click on launch instance



Step2:Give the name for the instance.



Step3:Select the ubuntu Amazon machine image

The screenshot shows the AWS Lambda console interface. On the left, there's a sidebar with a search bar and a 'Quick Start' section featuring logos for Amazon Linux, macOS, Ubuntu, Windows, Red Hat, and S. Below this is a section for 'Amazon Machine Image (AMI)'. It displays the selected AMI: 'Ubuntu Server 22.04 LTS (HVM), SSD Volume Type' (ami-0f8ca728008ff5af4). The status is 'Free tier eligible'. To the right is a 'Summary' panel with fields for 'Number of instances' (set to 1), 'Software Image (AMI)' (Canonical, Ubuntu, 22.04 LTS), 'Virtual server type (instance type)' (t2.micro), and a note about the free tier. At the bottom are 'Cancel' and 'Launch instance' buttons.

Step4:The instance type is t2.micro

This screenshot shows the AWS Lambda console with the 'Instance type' section open. It lists the 't2.micro' instance type, which is described as 'Family: t2 - 1 vCPU - 1 GiB Memory' and includes details for On-Demand and Reserved pricing. To the right is a 'Summary' panel with a 'Number of instances' set to 1, 'Software Image (AMI)' (Canonical, Ubuntu, 22.04 LTS), and 'Virtual server type (instance type)' (t2.micro).

Step5:Create a key pair with name ubuntu and it is of .pem format

This screenshot shows the AWS Lambda console with the 'Create key pair' dialog open. The 'Key pair name' field is filled with 'ubuntu'. The 'Key pair type' is set to 'RSA'. Under 'Private key file format', the option '.pem' is selected. The dialog also contains a note about connecting to the instance. At the bottom are 'Cancel' and 'Create key pair' buttons.

Step6: Use the default VPC and subnet, enable the auto assign public IP.

Step7: Create a security group and enable the ssh port, http port and https port.

Step8: Keep the storage settings default.

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

The selected AMI contains more instance store volumes than the instance allows. Only the first 0 instance store volumes from the AMI will be accessible from the instance

0 x File systems

Summary

Number of instances Info

1

Software Image (AMI)

Canonical, Ubuntu, 22.04 LTS, ... read more

ami-0f8ca728008ff5af4

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 AMIs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of

Step 9: Click on launch instance.

Summary

Number of instances Info

1

Software Image (AMI)

Canonical, Ubuntu, 22.04 LTS, ... read more

ami-0f8ca728008ff5af4

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 AMIs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of

Cancel

Launch instance



Step10:The instance is launched successfully and it is now running.

The screenshot shows the AWS EC2 Instances page. The left sidebar is expanded to show the "Instances" section. The main area displays a table titled "Instances (1/1) Info" with one row for the instance "myubuntuserver" (Instance ID: i-09fefb796b24b2462). The instance is shown as "Running". The "Details" tab is selected in the instance details panel, which provides the following information:

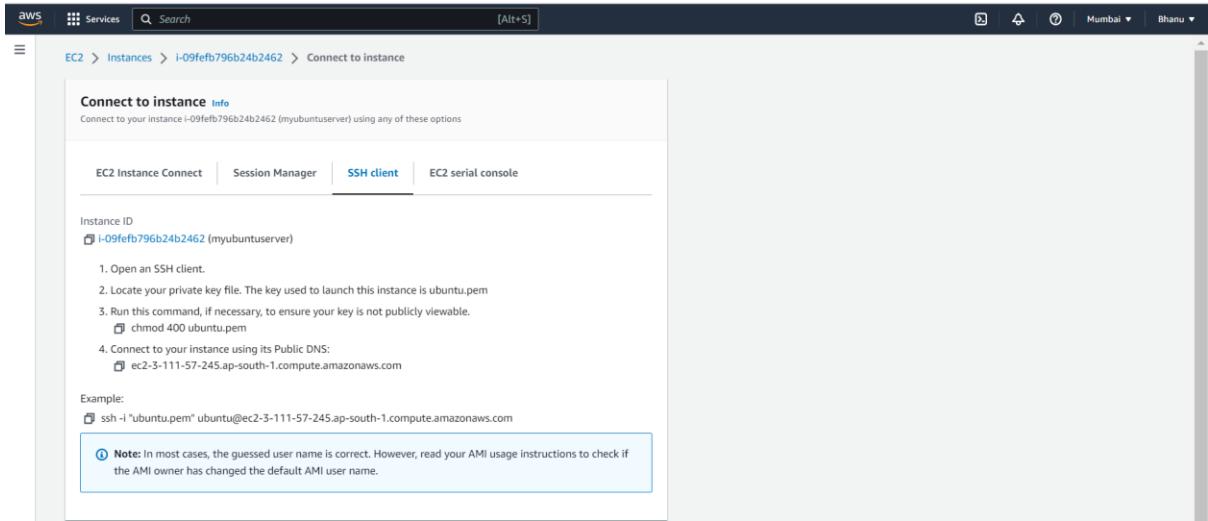
Attribute	Value
Instance ID	i-09fefb796b24b2462 (myubuntuserver)
IPV6 address	-
Hostname type	IP name: ip-172-31-6-138.ap-south-1.compute.internal
Answer private resource DNS name	IPv4 (A)
Instance type	t2.micro

The screenshot shows the AWS EC2 Instances page. The left sidebar is expanded to show the "Instances" section. The main area displays a table titled "Instances (1/1) Info" with one row for the instance "myubuntuserver" (Instance ID: i-09fefb796b24b2462). The instance is shown as "Running". The "Details" tab is selected in the instance details panel, which provides the following information:

Attribute	Value
Hostname type	IP name: ip-172-31-6-138.ap-south-1.compute.internal
Answer private resource DNS name	IPv4 (A)
Auto-assigned IP address	3.111.57.245 [Public IP]
IAM Role	-
Platform	Ubuntu (inferred)
VPC ID	vpc-040e0a0601cccd52d9
Subnet ID	subnet-08f1d15b1c498ff2f
AMI ID	ami-0f8ca728008ff5af4

Step11:select the instance and choose connect.

Copy the ssh



Step 12: Open the git bash and locate to the folder where you have the keypair downloaded .

Then give the ssh command to connect to the instance.

```
ubuntu@ip-172-31-6-138: ~
Bhanu@DESKTOP-SA605DI MINGW64 ~ (master)
$ cd Downloads

Bhanu@DESKTOP-SA605DI MINGW64 ~/Downloads (master)
$ ssh -i "ubuntu.pem" ubuntu@ec2-3-111-57-245.ap-south-1.compute.amazonaws.com
The authenticity of host 'ec2-3-111-57-245.ap-south-1.compute.amazonaws.com (3.1
11.57.245)' can't be established.
ED25519 key fingerprint is SHA256:NE/zeL9bvDHHHJt6SwmdnqJV0tEWUMYZ2RUNsyRwnzs .
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-3-111-57-245.ap-south-1.compute.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1028-aws x86_64)
```

Step13:

Now we are successfully connected to the instance.

Give the **sudo apt update** command for all the updations to be made.

```
Ubuntu@ip-172-31-6-138: ~
```

```
Bhanu@DESKTOP-SA605DI MINGW64 ~ (master)
$ cd Downloads

Bhanu@DESKTOP-SA605DI MINGW64 ~/Downloads (master)
$ ssh -i "ubuntu.pem" ubuntu@ec2-3-111-57-245.ap-south-1.compute.amazonaws.com
The authenticity of host 'ec2-3-111-57-245.ap-south-1.compute.amazonaws.com (3.1
11.57.245)' can't be established.
ED25519 key fingerprint is SHA256:NE/zeL9bvDHHHJt6SwmdnqJV0tEWUMYZ2RUNsyRwnzs.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-3-111-57-245.ap-south-1.compute.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1028-aws x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

System information as of Fri Mar  3 17:35:42 UTC 2023

System load:  0.0107421875   Processes:          99
Usage of /:   19.8% of 7.57GB   Users logged in:    0
Memory usage: 19%                  IPv4 address for eth0: 172.31.6.138
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

Ubuntu@ip-172-31-6-138:~$
```

Step 14:

To update use the below command

```
sudo apt update
```

```
ubuntu@ip-172-31-6-138:~
```

```
ubuntu@ip-172-31-6-138:~$ sudo apt update
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [107 kB]
Get:5 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:6 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [680 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [139 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [8528 B]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [637 kB]
Get:10 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [99.7 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [696 kB]
Get:12 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:13 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [111 kB]
Get:14 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [13.5 kB]
Get:15 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [4960 B]
Get:16 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [996 B]
Get:17 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [240 B]
Get:18 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:19 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:20 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:21 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:22 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [939 kB]
Get:23 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [203 kB]
Get:24 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [13.6 kB]
Get:25 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [680 kB]
Get:26 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [106 kB]
Get:27 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 c-n-f Metadata [584 B]
Get:28 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [877 kB]
Get:29 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [172 kB]
Get:30 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [17.9 kB]
Get:31 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [9696 B]
Get:32 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [3260 B]
Get:33 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [444 B]
Get:34 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [40.7 kB]
Get:35 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [9800 B]
Get:36 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [392 B]
Get:37 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:38 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [19.5 kB]
Get:39 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [14.0 kB]
Get:40 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [392 B]
Get:41 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Fetched 26.2 MB in 6s (4254 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
38 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-6-138:~$ |
```

Step 15:

To install the node js the command is

```
sudo apt install nodejs
```

```

ubuntu@ip-172-31-6-138:~$ sudo apt install nodejs
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  javascript-common libc-ares2 libjs-highlight.js libnode72 nodejs-doc
Suggested packages:
  apache2 | lighttpd | httpd npm
The following NEW packages will be installed:
  javascript-common libc-ares2 libjs-highlight.js libnode72 nodejs nodejs-doc
0 upgraded, 6 newly installed, 0 to remove and 38 not upgraded.
Need to get 13.7 MB of archives.
After this operation, 53.9 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 javascript-common all 11+nmui1 [5936 B]
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 libjs-highlight.js all 9.18.5+dfsg1-1 [367 kB]
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libc-ares2 amd64 1.18.1-1ubuntu0.22.04.1 [45.1 kB]
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 libnode72 amd64 12.22.9~dfsg-1ubuntu3 [10.8 kB]
Get:5 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 nodejs-doc all 12.22.9~dfsg-1ubuntu3 [2409 kB]
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 nodejs amd64 12.22.9~dfsg-1ubuntu3 [122 kB]
Fetched 13.7 MB in 2s (5895 kB/s)
Selecting previously unselected package javascript-common.
(Reading database ... 63605 files and directories currently installed.)
Preparing to unpack .../0-javascript-common_11+nmui1_all.deb ...
Unpacking javascript-common (11+nmui1) ...
Selecting previously unselected package libjs-highlight.js.
Preparing to unpack .../1-libjs-highlight.js_9.18.5+dfsg1-1_all.deb ...
Unpacking libjs-highlight.js (9.18.5+dfsg1-1) ...
Selecting previously unselected package libc-ares2:amd64.
Preparing to unpack .../2-libc-ares2_1.18.1-1ubuntu0.22.04.1_amd64.deb ...
Unpacking libc-ares2:amd64 (1.18.1-1ubuntu0.22.04.1) ...
Selecting previously unselected package libnode72:amd64.
Preparing to unpack .../3-libnode72_12.22.9~dfsg-1ubuntu3_amd64.deb ...
Unpacking libnode72:amd64 (12.22.9~dfsg-1ubuntu3) ...
Selecting previously unselected package nodejs-doc.
Preparing to unpack .../4-nodejs-doc_12.22.9~dfsg-1ubuntu3_all.deb ...
Unpacking nodejs-doc (12.22.9~dfsg-1ubuntu3) ...
Selecting previously unselected package nodejs.
Preparing to unpack .../5-nodejs_12.22.9~dfsg-1ubuntu3_amd64.deb ...
Unpacking nodejs (12.22.9~dfsg-1ubuntu3) ...
Setting up javascript-common (11+nmui1) ...
Setting up libc-ares2:amd64 (1.18.1-1ubuntu0.22.04.1) ...
Setting up libnode72:amd64 (12.22.9~dfsg-1ubuntu3) ...
Setting up libjs-highlight.js (9.18.5+dfsg1-1) ...
Setting up nodejs (12.22.9~dfsg-1ubuntu3) ...
update-alternatives: using /usr/bin/nodejs to provide /usr/bin/js (js) in auto mode
Setting up nodejs-doc (12.22.9~dfsg-1ubuntu3) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...

```

Step 16:

The node js is now installed,to check the version of node js use the command,

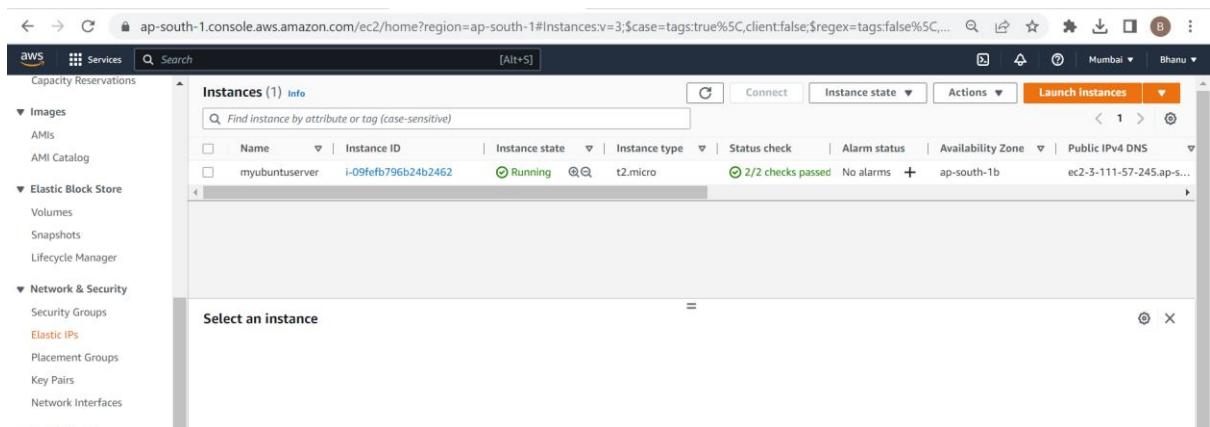
node --version

```

ubuntu@ip-172-31-6-138:~$ node --version
v12.22.9
ubuntu@ip-172-31-6-138:~$
```

Configuring elastic ip address:

Step1:In the network and security panel,choose the elastic ips



Step 2: Choose allocate elastic ip address

The screenshot shows the AWS Services navigation bar with 'Capacity Reservations' selected. Under the 'Elastic IP addresses' heading, there is a search bar and a table with columns: Name, Allocated IPv4 address, Type, Allocation ID, Reverse DNS record, and Associated. A message at the bottom states 'No Elastic IP addresses found in this Region'.

Step3:

Select the network border group or you can also leave it as default.

Select the amazon's pool of IPv4 address.

The screenshot shows the 'Allocate Elastic IP address' page under EC2 > Elastic IP addresses. It includes sections for 'Elastic IP address settings' (with a Network Border Group dropdown set to 'ap-south-1'), 'Global static IP addresses' (with a 'Create accelerator' button), and 'Tags - optional' (with a key-value pair 'myip' and 'elasticip').

Tags are optional ,you can give it as key value,

The screenshot shows the 'Tags - optional' dialog with a key 'myip' and a value 'elasticip'. It includes a 'Custom tag value' input field, an 'Add new tag' button, and a note about adding up to 49 more tags. At the bottom are 'Cancel' and 'Allocate' buttons.

Step 4: Click on allocate.

The screenshot shows a green success message 'Elastic IP address allocated successfully.' above the 'Elastic IP addresses (1/1)' table. The table has one row with a Public IPv4 address of 3.7.16.3, a Type of Public IP, and an Allocation ID of eipalloc-0a4b6ac01980b8127. There is also an 'Associate this Elastic IP address' button.

The screenshot shows the AWS EC2 service dashboard. A green success message at the top states "Elastic IP address allocated successfully. Elastic IP address 3.7.16.3". Below this, the "Elastic IP addresses (1/1)" section displays a single entry for the address 3.7.16.3, which is a Public IP type associated with an allocation ID eipalloc-0a4b6ac01980b8127. The "Actions" dropdown menu is open, showing options like "Associate this Elastic IP address", "Allocate Elastic IP address", "View details", "Release Elastic IP addresses", "Associate Elastic IP address" (which is highlighted in orange), "Disassociate Elastic IP address", and "Update reverse DNS".

**You can view the summary by selecting the elastic ip.

Step5: Select the elastic ip and choose actions,under actions select the associate elastic ip address.

This screenshot is identical to the one above, showing the successful allocation of the Elastic IP address 3.7.16.3. The "Associate Elastic IP address" option is now explicitly selected in the Actions dropdown menu.

Step 6:To associate the elastic ip to an instance select the resource type as instance.

By default it gives the private ip address of the instance.

This screenshot shows the "Associate Elastic IP address" wizard. It starts with the question "Choose the instance or network interface to associate to this Elastic IP address (3.7.16.3)". The "Resource type" section has "Instance" selected. A note below 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". A note at the bottom says: "If no private IP address is specified, the Elastic IP address will be associated with the primary private IP address." The "Instance" field contains the ID "i-09febf796b24b2462" and the "Private IP address" field contains "172.31.6.138".

Step7:click on associate.

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

Reassociation
Specify whether the Elastic IP address can be reassigned to a different resource if it already associated with a resource.

 Allow this Elastic IP address to be reassigned

Cancel **Associate**

****Now the Elastic ip address is successfully associated to the instance**

Elastic IP address associated successfully.
Elastic IP address 3.7.16.3 has been associated with instance i-09febf796b24b2462

Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record	Associated instance ID
3.7.16.3	3.7.16.3	Public IP	eipalloc-0a4b6ac01980b8127	-	i-09febf796b24b2462

Summary

Allocated IPv4 address	Type	Allocation ID	Reverse DNS record
3.7.16.3	Public IP	eipalloc-0a4b6ac01980b8127	-
Association ID	Scope	Associated instance ID	Private IP address
eipassoc-0fe00b292b91e098e	VPC	i-09febf796b24b2462	172.31.6.138
Network interface ID	Network interface owner account ID	Public DNS	NAT Gateway ID
eni-074ffcc91c4a3c1465	817201678563	ec2-3-7-16-3.ap-south-1.compute.amazonaws.com	-

Step 8:Select the elastic ip to view the summary,in the summary it shows the instance id to which it has been associated.

Elastic IP address associated successfully.
Elastic IP address 3.7.16.3 has been associated with instance i-09febf796b24b2462

Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record	Associated instance ID
3.7.16.3	3.7.16.3	Public IP	eipalloc-0a4b6ac01980b8127	-	i-09febf796b24b2462

Summary

Allocated IPv4 address	Type	Allocation ID	Reverse DNS record
3.7.16.3	Public IP	eipalloc-0a4b6ac01980b8127	-
Association ID	Scope	Associated instance ID	Private IP address
eipassoc-0fe00b292b91e098e	VPC	i-09febf796b24b2462	172.31.6.138
Network interface ID	Network interface owner account ID	Public DNS	NAT Gateway ID
eni-074ffcc91c4a3c1465	817201678563	ec2-3-7-16-3.ap-south-1.compute.amazonaws.com	-
Address pool	Network Border Group		
Amazon	ap-south-1		

Step 9:Go to instances and select the instance,you can see that the elastic ip would appear there.

Instance: i-09fefb796b24b2462 (myubuntuserver)

Details	Security	Networking	Storage	Status checks	Monitoring	Tags																												
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An Elastic IP address is a static public IPv4 address associated with your AWS account in a specific Region. Unlike an auto-assigned public IP address, an Elastic IP address is preserved after you stop and start your instance in a virtual private cloud (VPC).

Create an S3 bucket and upload an object to it and show the object URL for reference.

Step1:In the services ,go to S3.the following page appears,click on create bucket.

Create a bucket

Every object in S3 is stored in a bucket. To upload files and folders to S3, you'll need to create a bucket where the objects will be stored.

Create bucket

Pricing

With S3, there are no minimum fees. You only pay for what you use. Prices are based on the location of your S3 bucket.

Estimate your monthly bill using the [AWS Simple Monthly Calculator](#)

How it works

Introduction to Amazon S3

Copy link

Step 2: Give the bucket name and select the aws region in which to create the bucket.

The screenshot shows the 'Create bucket' page in the AWS S3 console. The 'General configuration' section is active. A 'Bucket name' field contains 'bhanukondibucket'. An 'AWS Region' dropdown is set to 'Asia Pacific (Mumbai) ap-south-1'. Below these fields is a note about copy settings from existing buckets, with a 'Choose bucket' button.

Step 3: Select the option ACLs disabled under the Object ownership.

The screenshot shows the 'Object Ownership' page. It features two radio button options: 'ACLs disabled (recommended)' (selected) and 'ACLs enabled'. Below this is a note about upcoming permission changes to disable ACLs, starting in April 2023.

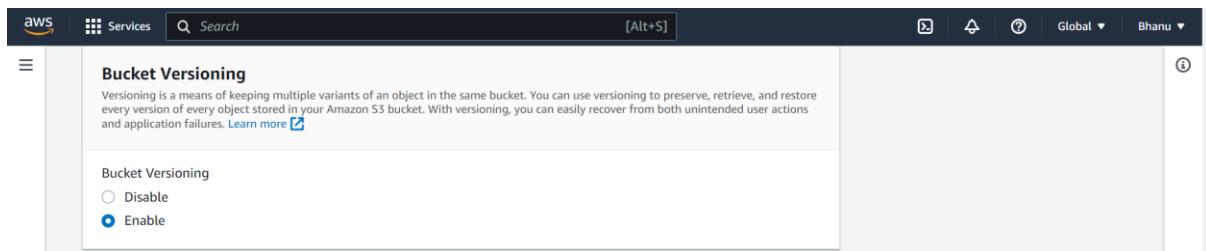
Step 4: Uncheck the block all public access for the bucket.

The screenshot shows the 'Block Public Access settings for this bucket' page. It includes a note about public access being granted through various lists and policies. A main checkbox for 'Block all public access' is present, along with four detailed sub-options: 'Block public access to buckets and objects granted through new access control lists (ACLs)', 'Block public access to buckets and objects granted through any access control lists (ACLs)', 'Block public access to buckets and objects granted through new public bucket or access point policies', and 'Block public and cross-account access to buckets and objects through any public bucket or access point policies'. The 'Block all public access' checkbox is currently unchecked.

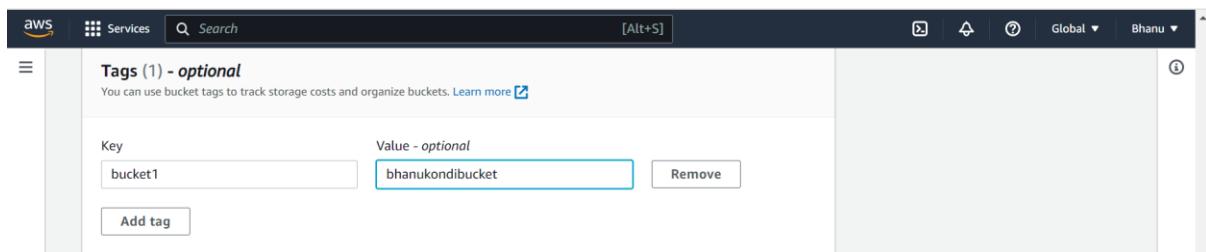
****Check the acknowledgment box.**



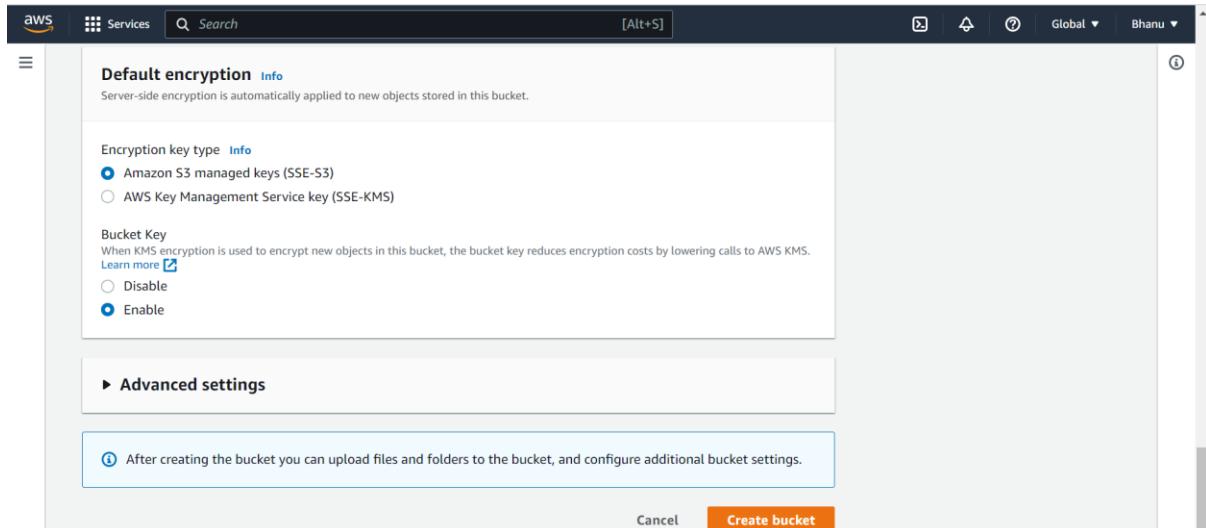
Step 5: Enable the bucket versioning. To keep the multiple variants of an object in same bucket.



Step 6: You can give tags if needed. it is optional.



Step 7: The default encryption is Amazon S3 managed keys and enable the bucket key.



Click on create bucket

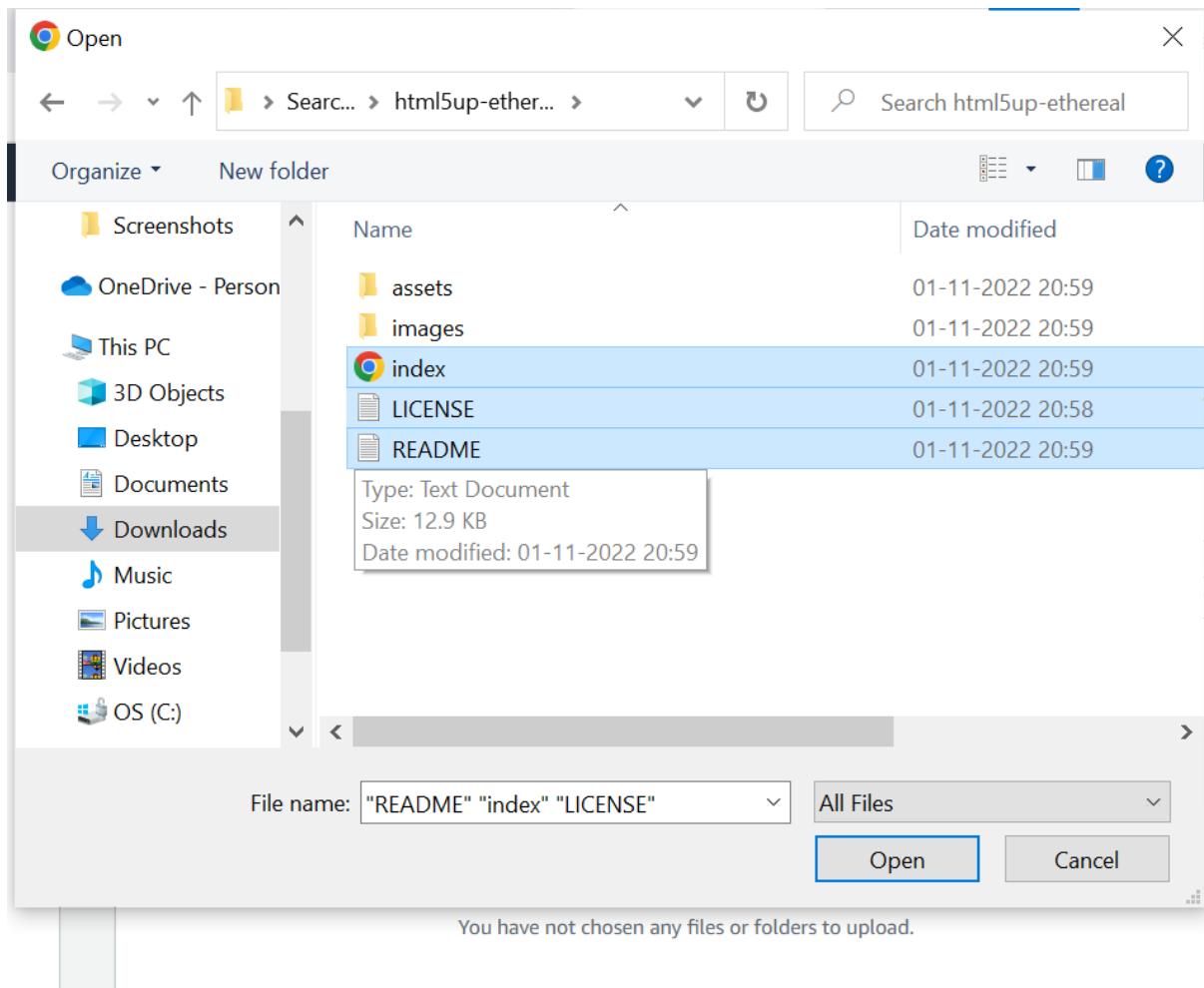
The screenshot shows the AWS S3 service page. A green success banner at the top states: "Successfully created bucket 'bhanukondibucket'. To upload files and folders, or to configure additional bucket settings choose View details." Below the banner, the "Buckets" section displays one bucket named "bhanukondibucket". The bucket details show it was created on March 3, 2023, at 23:22:19 (UTC+05:30) in the Asia Pacific (Mumbai) region (ap-south-1). The "Create bucket" button is visible at the top of the bucket list.

Step 8: The bucket is created successfully. you can upload the objects by clicking on upload.

The screenshot shows the "bhanukondibucket" details page. The "Objects" tab is selected. At the top, there is a "Upload" button. Below it, a search bar and a "Show versions" toggle are present. A table at the bottom lists "No objects" with columns for Name, Type, Last modified, Size, and Storage class.

Step 9: Click on add files to add the files, and to add folders click on add folder.

The screenshot shows the "Upload" interface for the "bhanukondibucket". The "Add files" tab is selected. It features a large blue "Drag and drop files and folders you want to upload here" area. Below it, a table titled "Files and folders (0)" shows "No files or folders" uploaded. A note at the bottom states: "You have not chosen any files or folders to upload."



Step 10: Now we have added files and folder (objects) in the bucket.

A screenshot of the AWS S3 console. The top navigation bar shows "Amazon S3 > Buckets > bhanukondibucket > Upload". The main area is titled "Upload" with an "Info" link. It instructs users to add files or folders. Below is a table titled "Files and folders (74 Total, 3.6 MB)" showing a list of 74 files. The columns are Name, Folder, Type, and Size. The files are mostly named "01.jpg" through "05.jpg" and are located in "images/gallery/thumbs/" and "images/gallery/fulls/".

Name	Folder	Type	Size
01.jpg	images/gallery/thumbs/	image/jpeg	13.4 KB
01.jpg	images/gallery/fulls/	image/jpeg	30.5 KB
02.jpg	images/gallery/thumbs/	image/jpeg	5.5 KB
02.jpg	images/gallery/fulls/	image/jpeg	21.6 KB
03.jpg	images/gallery/thumbs/	image/jpeg	5.8 KB
03.jpg	images/gallery/fulls/	image/jpeg	23.6 KB
04.jpg	images/gallery/thumbs/	image/jpeg	16.3 KB
04.jpg	images/gallery/fulls/	image/jpeg	26.8 KB
05.jpg	images/gallery/thumbs/	image/jpeg	12.0 KB
05.jpg	images/gallery/fulls/	image/jpeg	28.1 KB

Step 11: Click on upload.

Destination

Destination
s3://bhanukondibucket

▼ Destination details
Bucket settings that impact new objects stored in the specified destination.

Bucket Versioning When enabled, multiple variants of an object can be stored in the bucket to easily recover from unintended user actions and application failures. Learn more	Default encryption key type If an encryption key isn't specified, bucket settings for default encryption are used to encrypt objects when storing them in Amazon S3. Learn more	Object Lock When enabled, objects in this bucket might be prevented from being deleted or overwritten for a fixed amount of time or indefinitely. Learn more
Enabled	Amazon S3 managed keys (SSE-S3)	Disabled

▶ Permissions
Grant public access and access to other AWS accounts.

▶ Properties
Specify storage class, encryption settings, tags, and more.

Cancel Upload

Step 12: Now the objects are uploaded to the bucket.

Amazon S3 > Buckets > bhanukondibucket

bhanukondibucket [Info](#)

Objects Properties Permissions Metrics Management Access Points

Objects (5)
Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Name	Type	Last modified	Size	Storage class
assets/	Folder	-	-	-
images/	Folder	-	-	-
index.html	html	March 3, 2023, 23:36:30 (UTC+05:30)	18.0 KB	Standard
LICENSE.txt	txt	March 3, 2023, 23:36:31 (UTC+05:30)	16.7 KB	Standard
README.txt	txt	March 3, 2023, 23:36:32 (UTC+05:30)	13.0 KB	Standard

Step 13: Go to properties and go to the static website hosting.

Amazon S3 > Buckets > bhanukondibucket

bhanukondibucket [Info](#)

Objects **Properties** Permissions Metrics Management Access Points

Bucket overview

AWS Region Asia Pacific (Mumbai) ap-south-1	Amazon Resource Name (ARN) arn:aws:s3:::bhanukondibucket	Creation date March 3, 2023, 23:22:19 (UTC+05:30)
--	---	--

Bucket Versioning
Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. [Learn more](#)

Edit

Bucket Versioning
Enabled

Multi-factor authentication (MFA) delete
An additional layer of security that requires multi-factor authentication for changing Bucket Versioning settings and permanently deleting object versions. To modify MFA delete settings, use the AWS CLI, AWS SDK, or the Amazon S3 REST API. [Learn more](#)

Tags (1)

Step 14: click on edit and enable the static website hosting and give the name of the main document.

Static website hosting
Use this bucket to host a website or redirect requests. [Learn more](#)

Static website hosting
 Disable
 Enable

Hosting type
 Host a static website Use the bucket endpoint as the web address. [Learn more](#)
 Redirect requests for an object Redirect requests to another bucket or domain. [Learn more](#)

Index document
Specify the home or default page of the website.
`index.html`

Error document - optional
This is returned when an error occurs.
`error.html`

Redirection rules - optional
Redirection rules, written in JSON, automatically redirect webpage requests for specific content. [Learn more](#)

Step 15: Go to permission tab and edit the bucket policy with the predefined template ,so now the bucket is publicly accessible.

Bucket policy
The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policies don't apply to objects owned by other accounts. [Learn more](#)

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "PublicRead",
      "Effect": "Allow",
      "Principal": "*",
      "Action": [
        "s3:GetObject",
        "s3:GetObjectVersion"
      ],
      "Resource": "arn:aws:s3:::bhanukondibucket/*"
    }
  ]
}
```

[Edit](#) [Delete](#) [Copy](#)

Object Lock
Disabled

Requester pays
When enabled, the requester pays for requests and data transfer costs, and anonymous access to this bucket is disabled. [Learn more](#)

Requester pays
Disabled

Static website hosting
Use this bucket to host a website or redirect requests. [Learn more](#)

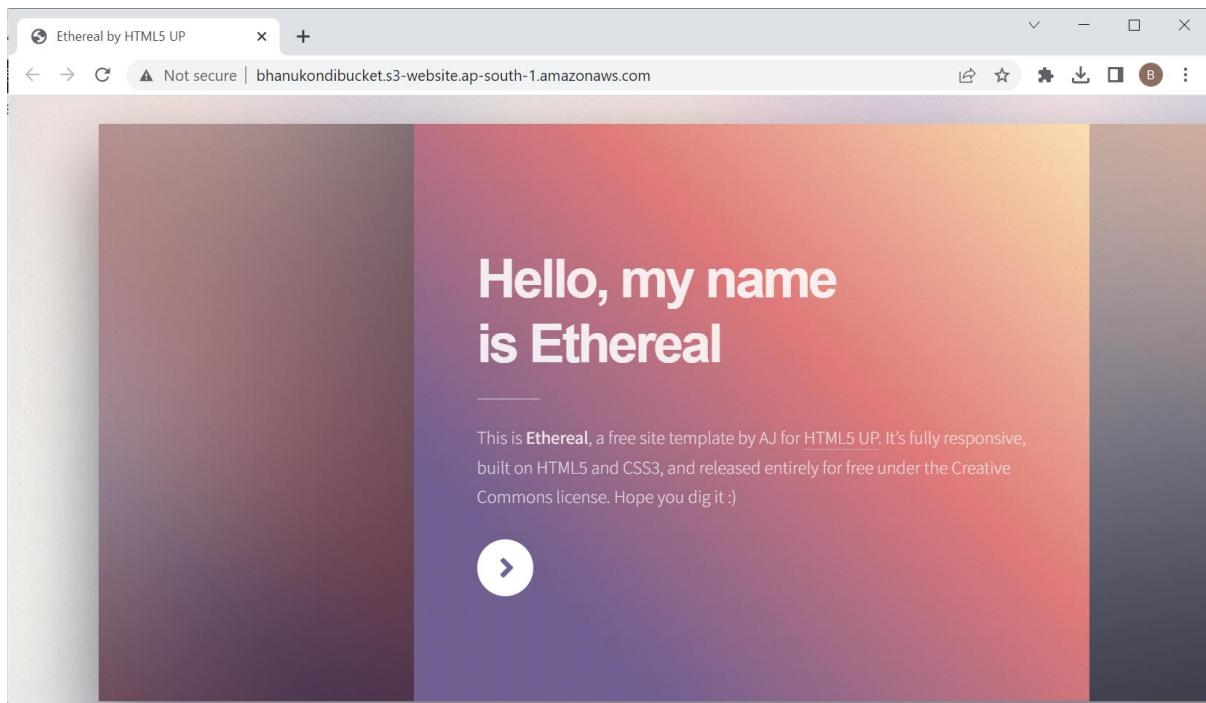
Static website hosting
Enabled

Hosting type
Bucket hosting

Bucket website endpoint copied [Copy](#)
Our bucket as a static website, the website is available at the AWS Region-specific website endpoint of the bucket. [Learn more](#)

<http://bhanukondibucket.s3-website.ap-south-1.amazonaws.com>

Step 16: Go to the static website hosting under properties and copy the link and paste it in browser.



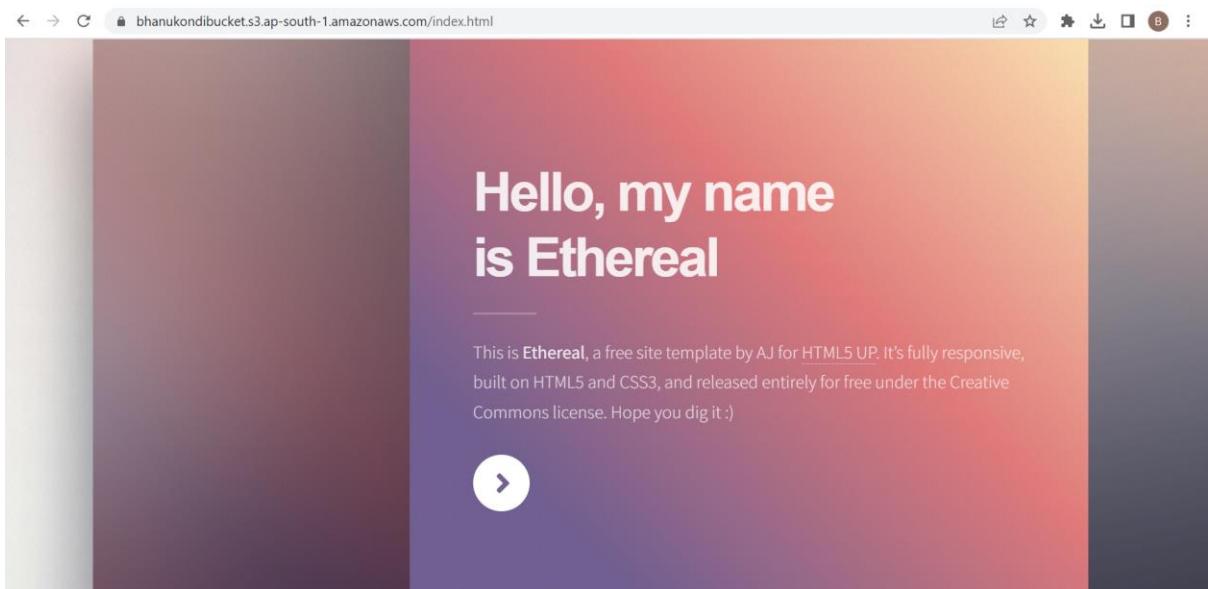
Step 17: Go to the bucket and select any object click on copy URL for the object reference URL and open it in browser.

A screenshot of the AWS S3 console. On the left, there is a sidebar with various options like Buckets, Access Points, Object Lambda Access Points, Multi-Region Access Points, Batch Operations, IAM Access Analyzer for S3, Block Public Access settings for this account, Storage Lens, Dashboards, AWS Organizations settings, Feature spotlight, and AWS Marketplace for S3. The main area shows a bucket named "bhanukondibucket". The "Objects" tab is selected, showing a list of objects: "index.html" (checked), "LICENSE.txt", and "README.txt". There are also two folders: "assets/" and "images/". The "index.html" file is highlighted, and a tooltip says "Object URL Copied".

Step 18: The following page appears.

The object reference url is

<https://bhanukondibucket.s3.ap-south-1.amazonaws.com/index.html>



Step 19: Open bucket and upload another object.

A screenshot of the AWS S3 'Upload' interface. The top navigation bar shows 'Amazon S3 > Buckets > bhanukondibucket > Upload'. The main area is titled 'Upload' with an 'Info' link. A message at the top says: 'Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. Learn more' with a link icon. Below this is a dashed-line box for dragging files. A table titled 'Files and folders (1 Total, 707.0 B)' shows one item: 'amazonS3.txt' (text/plain, 707.0 B). There are 'Remove', 'Add files', and 'Add folder' buttons. A search bar and navigation arrows are also present. The 'Destination' section shows 'Destination' set to 's3://bhanukondibucket'. Under 'Destination details', it says: 'Bucket settings that impact new objects stored in the specified destination.'

**Click on upload.

A screenshot of the AWS S3 'Upload' interface, identical to the previous one but with additional sections at the bottom. The 'Permissions' section includes a note about granting public access and access to other AWS accounts. The 'Properties' section includes a note about specifying storage class, encryption settings, tags, and more. At the bottom right are 'Cancel' and 'Upload' buttons, with the 'Upload' button being highlighted in orange.

****The file is uploaded successfully and click on close.**

The screenshot shows the AWS S3 'Upload: status' page. At the top, a green banner displays a success message: 'Upload succeeded' with a link to 'View details below.' Below the banner, the page title is 'Upload: status'. A note says 'The information below will no longer be available after you navigate away from this page.' Under the 'Summary' section, it shows 'Destination s3://bhanukondibucket' with 'Succeeded' status and '1 file, 707.0 B (100.00%)'. The 'Failed' section shows '0 files, 0 B (0%)'. Below this, there are tabs for 'Files and folders' (selected) and 'Configuration'. The 'Files and folders' section shows a table with one item: 'amazonS3.txt' (text/plain, 707.0 B, Succeeded). There is also a search bar and navigation controls.

Step 20: Go to the bucket and select the object that is uploaded now.

The screenshot shows the AWS S3 'Objects' page for the 'bhanukondibucket'. The top navigation bar shows 'Amazon S3 > Buckets > bhanukondibucket'. The 'Info' tab is selected, showing 'Publicly accessible'. Below this, the 'Objects' section shows 6 objects. The table lists 'amazonS3.txt' as a txt file last modified on March 3, 2023, at 23:43:38 (UTC+05:30), with a size of 707.0 B and Standard storage class. Action buttons include Copy S3 URI, Copy URL, Download, Open, Delete, Actions, Create folder, and Upload. A search bar and navigation controls are also present.

Step 21: Click on copy Url.

the object reference url is copied to the clipboard.

The screenshot shows the AWS S3 'Objects' page for the 'bhanukondibucket'. The top navigation bar shows 'Amazon S3 > Buckets > bhanukondibucket'. The 'Info' tab is selected, showing 'Publicly accessible'. Below this, the 'Objects' section shows 6 objects. A message 'Object URL Copied' is displayed above the action buttons. The table lists 'amazonS3.txt' as a txt file last modified on March 3, 2023, at 23:43:38 (UTC+05:30), with a size of 707.0 B and Standard storage class. Action buttons include Copy S3 URI, Copy URL, Download, Open, Delete, Actions, Create folder, and Upload. A search bar and navigation controls are also present.

The object reference url is

<https://bhanukondibucket.s3.ap-south-1.amazonaws.com/amazonS3.txt>

Step 22:

Go to browser and paste the object reference url then you can see the content in the file that is uploaded as shown below.

