

Project 1:Deploying website on Aws EC2 instances

1.Creating Vpc

1. In AWS console, search VPC.
2. In VPC dashboard , you will get my VPC's and click on myvpc's.
3. Click on create VPC. Select resource to create as vpc only.
4. Give name as theeksha-vpc and IPv4 CIDR as 10.0.0.0/16.
5. Then click on create VPC.

The screenshot shows the AWS VPC Details page for a VPC named 'theeksha-vpc'. The VPC ID is 'vpc-0075af2e567a19c68'. The 'Details' tab is selected, showing the following configuration:

Setting	Value
VPC ID	vpc-0075af2e567a19c68
State	Available
DNS resolution	Enabled
Tenancy	Default
Main network ACL	acl-Qaad01e6d0745e2ad
IPv6 CIDR (Network border group)	-
Default VPC	No
IPv4 CIDR	10.0.0.0/16
Network Address Usage metrics	Disabled
Block Public Access	Off
DHCP option set	dopt-0546965e8e423613a
Route 53 Resolver DNS Firewall rule groups	Failed to load rule groups
DNS hostnames	Disabled
Main route table	rtb-02cccc2ea8fe72454
IPv6 pool	-
Owner ID	471112860190

The 'Resource map' tab is also visible, showing the network topology:

- Subnets (2): Subnets within this VPC. One subnet is labeled 'theeksha-subnet 1'.
- Route tables (2): Route network traffic to resources. One route is labeled 'theeksha route'.
- Network connections (1): Connections to other networks. One connection is labeled 'theeksha-gateway'.

Internet gateway

Steps :

1. In VPC dashboard, click on Internet Gateway.
2. To create Internet gateway, click on create Internet Gateway.
3. Then give name as theeksha-igw and click on create Internet Gateway.
4. Your internet Gateway is created.

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VPC dashboard

EC2 Global View Filter by VPC

Virtual private cloud Your VPCs Subnets Route tables Internet gateways Egress-only internet gateways Carrier gateways DHCP option sets Elastic IPs Managed prefix lists NAT gateways Peering connections Security Network ACLs Security groups PrivateLink and Lattice Getting started Updated

Internet gateways (1/5) Info

Name	Internet gateway ID	State	VPC ID	Owner
-	igw-009ff448f7d304980	Attached	vpc-09933cf758b3ce4fe	471112860190
raksha-igw	igw-0148832f11744baac	Attached	vpc-062d8e18f89061d7c raksha-vpc	471112860190
shravya-igw	igw-029eeefbf4e2c93013	Attached	vpc-09327b3c8aa229285 shravya-vpc	471112860190
chaithalivpc	igw-050679fb18f5fd871	Detached	-	471112860190
<input checked="" type="checkbox"/> theeksha-gateway	igw-0cf396f9832a7da6d	Attached	vpc-0075af2e567a19c68 theeksha-vpc	471112860190

igw-0cf396f9832a7da6d / theeksha-gateway

Details Tags

Details

Internet gateway ID igw-0cf396f9832a7da6d	State Attached	VPC ID vpc-0075af2e567a19c68 theeksha-vpc	Owner 471112860190
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VPC dashboard

EC2 Global View Filter by VPC

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VPC > Internet gateways > igw-0cf396f9832a7da6d / theeksha-gateway

igw-0cf396f9832a7da6d / theeksha-gateway

Details Info

Internet gateway ID igw-0cf396f9832a7da6d	State Attached	VPC ID vpc-0075af2e567a19c68 theeksha-vpc	Owner 471112860190
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Tags

Manage tags

Key	Value
Name	theeksha-gateway

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Subnet1:

Steps :

1. To create subnet, go to VPC dashboard under virtual private cloud, click on subnet.
2. Select the vpc you have already created and in subnet setting, give subnet name as public-subnet-01
3. Then choose availability zone as region you have selected before creating the vpc and IPv4 subnet CIDR block as 10.0.1.0/24.
4. Then create one more subnet as following subnet but give name as publicsubnet-02 and then choose availability zone and IPv4 subnet CIDR block as 10.0.2.0/24.

The screenshot shows the AWS VPC Subnets Details page. The subnet ID is subnet-08079d838ca266d50, located in the eu-west-2a availability zone, associated with route table rtb-029128e177c5bd2ea. The subnet ARN is arn:aws:ec2:eu-west-2:471112860190:subnet/subnet-08079d838ca266d50. The IPv4 CIDR is 10.0.1.0/26, and the IPv6 CIDR is not specified. The state is available, and the network border group is eu-west-2. The subnet is not the default subnet. Customer-owned IPv4 and IPv6 pools are not assigned. DNS64 is disabled. The owner is 471112860190. The subnet is not publicly accessible. The page also shows tabs for Flow logs, Route table, Network ACL, CIDR reservations, Sharing, and Tags, with the Flow logs tab currently selected.

Subnet2:

The screenshot shows the AWS VPC Subnets page. The top navigation bar includes 'AWS Services' and a search bar. The main title is 'subnet-06a42bb7facc13f4 / theeksha-subnet 2'. On the left, a sidebar lists various VPC components like EC2 Global View, Virtual private cloud, Subnets, Route tables, Internet gateways, Egress-only internet gateways, Carrier gateways, DHCP option sets, Elastic IPs, Managed prefix lists, NAT gateways, and Peering connections. Below the sidebar, a 'Getting started' section is shown with 'Updated' status. The main content area displays the 'Details' tab for the selected subnet. Key information includes:

Setting	Value
Subnet ID	subnet-06a42bb7facc13f4
Subnet ARN	arn:aws:ec2:eu-west-2:47112860190:subnet/subnet-06a42bb7facc13f4
IPv4 CIDR	10.0.2.0/26
Availability Zone	eu-west-2b
Route table	rtb-029128e177c5bd2ea theeksha route
Auto-assign IPv6 address	No
IPv4 CIDR reservations	-
Resource name DNS A record	Disabled
Subnet State	Available
IPv6 CIDR	-
Network border group	eu-west-2
Default subnet	No
Customer-owned IPv4 pool	-
IPv6-only	No
DNS64	Disabled
Hostname type	IP name
Owner	471112860190

Below the details, there are tabs for 'Flow logs', 'Route table', 'Network ACL', 'CIDR reservations', 'Sharing', and 'Tags'. At the bottom, there are 'Actions' and 'Create flow log' buttons, along with copyright and footer links.

Router Table:

Steps :

1. To create Route table, click on create route table.
2. In route table setting, give route table name as anu-route-table-01 and select vpc that is created.
3. Then click on create route table.
4. After route table is created, go to routes and click on edit route and then click on add route.
5. Then in destination, select 0.0.0.0/0 as destination and target as Internet Gateways .
6. After selecting internet gateway, it allows to select the igw- and select the internet gateway that is created by you.
7. At last click on save changes.
8. Then go to subnet association and click on edit subnet association.
9. Select the subnet you have created and click on save changes

VPC dashboard

Route tables / rtb-029128e177c5bd2ea / theeksha route

Route table ID	Main	Explicit subnet associations	Edge associations
rtb-029128e177c5bd2ea	No	2 subnets	—
VPC	Owner ID		
vpc-0075af2e567a19c68 theeksha-vpc	471112860190		

Routes (2)

Destination	Target	Status	Propagated
0.0.0.0/0	igw-0cf396f9832a7da6d	Active	No
10.0.0.0/16	local	Active	No

Connection:

Steps:

1. Go to EC2 in AWS console and click on instances.
2. Click on launch instance and give the name for the instances as theeksha-server.
3. After giving name to instances, select application and OS Images as Amazon Linux and instances type as t2.micro .
4. In keypair, click on create keypair and give keypair name as anu-keypair and click on create keypair. The keypair is created.
5. Then in network setting, click edit. Select vpc and subnet and also assign public IP as enable.

EC2 Instances / i-0ea9e0253cd890123 / Connect to instance

Connect to instance info

Connect to your instance i-0ea9e0253cd890123 (theeksha-server) using any of these options

SSH client

Instance ID: i-0ea9e0253cd890123 (theeksha-server)

- Open an SSH client.
- Locate your private key file. The key used to launch this instance is theeksha1keypair.pem
- Run this command, if necessary, to ensure your key is not publicly viewable.
chmod 400 "theeksha1keypair.pem"
- Connect to your instance using its Public IP:
3.8.39.252

Example:
ssh -i "theeksha1keypair.pem" ec2-user@3.8.39.252

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

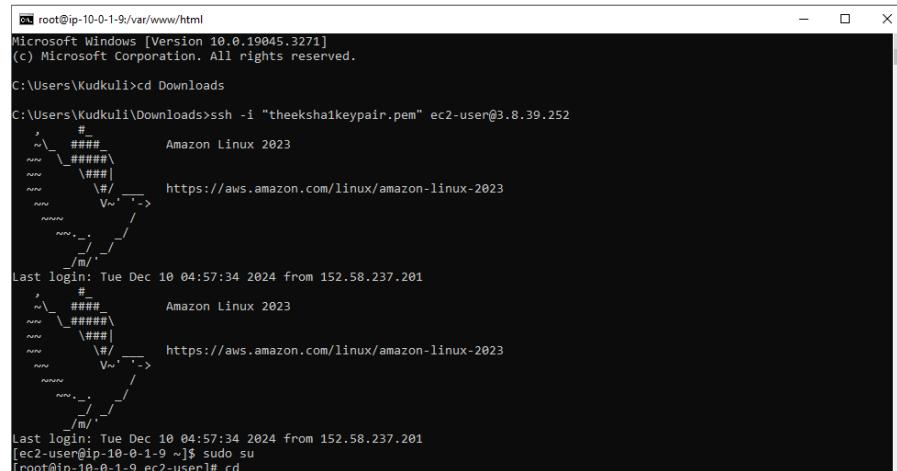
Cancel

Command Prompt:

Steps:

1. Go to command prompt and follow the following the commands:

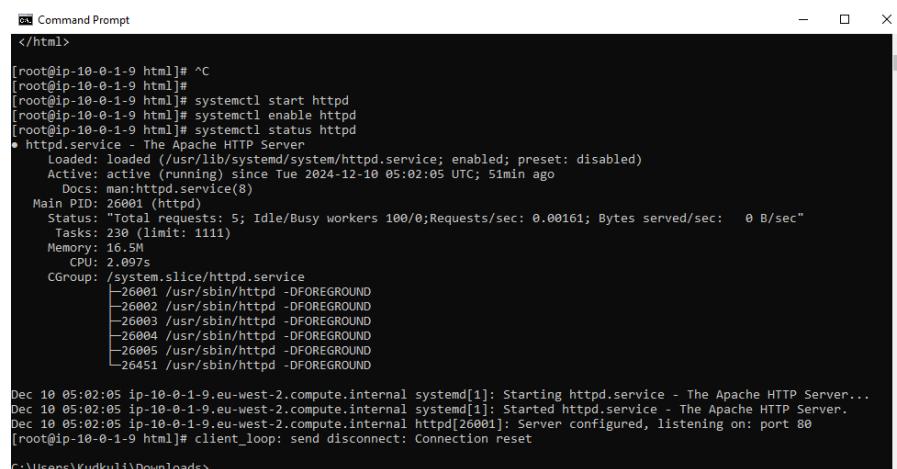
- Cd Downloads
- Paste the SSH client example.
- You will get to confirm the connecting, type yes.
- Then type sudo su and cd.
- Then type yum install httpd -y.
- After installation, type cd /var/www/html.
- Then type vi index.html and vi editor will get opened and press i to insert the content.
- After that, press esc and: wq to save the content.
- Go to instances, copy the public ip and paste on browser url



```
cmd root@ip-10-0-1-9:/var/www/html
Microsoft Windows [Version 10.0.19045.3271]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Kudkuli>cd Downloads

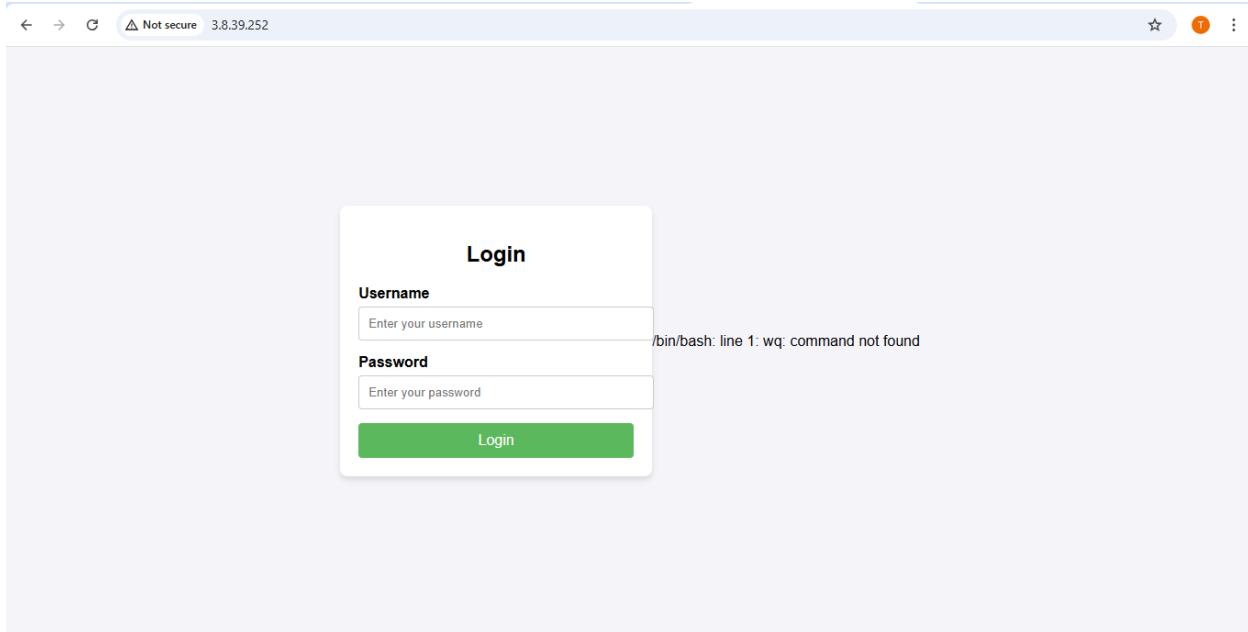
C:\Users\Kudkuli\Downloads>ssh -i "theeksha1keypair.pem" ec2-user@3.8.39.252
, _#
~\_###_ Amazon Linux 2023
~~\_####\ https://aws.amazon.com/linux/amazon-linux-2023
~~ \#/
~~ \_Vv, .->
~~ \_/
~~ \_/
~~ \_/
~~ \_m/
Last login: Tue Dec 10 04:57:34 2024 from 152.58.237.201
, _#
~\_###_ Amazon Linux 2023
~~\_####\ https://aws.amazon.com/linux/amazon-linux-2023
~~ \#/
~~ \_Vv, .->
~~ \_/
~~ \_/
~~ \_/
~~ \_m/
Last login: Tue Dec 10 04:57:34 2024 from 152.58.237.201
[ec2-user@ip-10-0-1-9 ~]$ sudo su
[root@ip-10-0-1-9 ec2-user]# cd
```



```
cmd Command Prompt
</html>
[root@ip-10-0-1-9 html]# ^C
[root@ip-10-0-1-9 html]# systemctl start httpd
[root@ip-10-0-1-9 html]# systemctl enable httpd
[root@ip-10-0-1-9 html]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Active: active (running) since Tue 2024-12-10 05:02:05 UTC; 51min ago
     Docs: man:httpd.service(8)
 Main PID: 26001 (httpd)
   Status: "Total requests: 5; Idle/Busy workers 100/0;Requests/sec: 0.00161; Bytes served/sec: 0 B/sec"
    Tasks: 230 (limit: 1111)
   Memory: 16.5M
      CPU: 2.097s
     CGroup: /system.slice/httpd.service
             └─26001 /usr/sbin/httpd -DFOREGROUND
             ├─26002 /usr/sbin/httpd -DFOREGROUND
             ├─26003 /usr/sbin/httpd -DFOREGROUND
             ├─26004 /usr/sbin/httpd -DFOREGROUND
             ├─26005 /usr/sbin/httpd -DFOREGROUND
             └─26451 /usr/sbin/httpd -DFOREGROUND

Dec 10 05:02:05 ip-10-0-1-9.eu-west-2.compute.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Dec 10 05:02:05 ip-10-0-1-9.eu-west-2.compute.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Dec 10 05:02:05 ip-10-0-1-9.eu-west-2.compute.internal httpd[26001]: Server configured, listening on: port 80
[root@ip-10-0-1-9 html]# client_loop: send disconnect: Connection reset
C:\Users\Kudkuli\Downloads>
```

Final Result

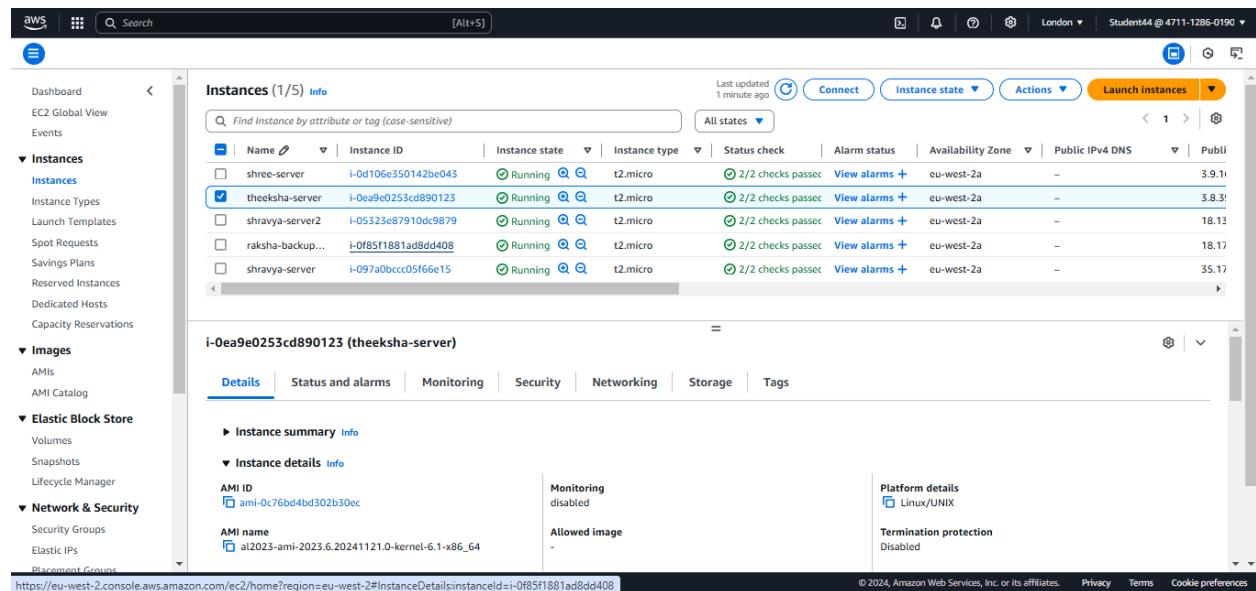


PROJECT 2: HOW TO CREATE NEW INSTANCE USING AMAZON MACHINE IMAGE

Creating image:

Steps:

1. To create image using AMI, go to EC2 and click on instances.
2. Select the instance that is created before and click on action.
3. In action, select image and template. In image and template, select create images.
4. Give name as anu-server-backup and description to the instances.



The screenshot shows the AWS EC2 Instances page. On the left, there's a navigation sidebar with sections like Dashboard, EC2 Global View, Events, Instances (selected), Images, Elastic Block Store, Network & Security, and Placement Groups. The main area displays a table of instances with columns: Name, Instance ID, Instance state, Instance type, Status check, Alarm status, Availability Zone, Public IPv4 DNS, and Public. There are five instances listed:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Publ
shree-server	i-0df106e350142be043	Running	t2.micro	2/2 checks passed	View alarms +	eu-west-2a	-	3.9.1
theeksha-server	i-0ea9e0253cd890123	Running	t2.micro	2/2 checks passed	View alarms +	eu-west-2a	-	3.8.3!
shravya-server2	i-05323e87910dc9879	Running	t2.micro	2/2 checks passed	View alarms +	eu-west-2a	-	18.13
raksha-backup...	i-0f85f1881ad8dd408	Running	t2.micro	2/2 checks passed	View alarms +	eu-west-2a	-	18.17
shravya-server	i-097a0bcc05f66e15	Running	t2.micro	2/2 checks passed	View alarms +	eu-west-2a	-	35.17

Below the table, a modal window is open for the selected instance 'i-0ea9e0253cd890123 (theeksha-server)'. The 'Details' tab is selected, showing sections for Instance summary, Instance details (AMI ID: ami-0c76bd4bd302b30ec, AMI name: al2023-ami-2023.6.20241121.0-kernel-6.1-x86_64), Monitoring (disabled), Allowed image (-), Platform details (Linux/UNIX), and Termination protection (Disabled). The URL at the bottom of the page is https://eu-west-2.console.aws.amazon.com/ec2/home?region=eu-west-2#instanceDetails\$instanceId=i-0f85f1881ad8dd408.

AMI Summary

The screenshot shows the AWS EC2 AMI Summary page. The top navigation bar includes the AWS logo, search bar, and account information (Student44 @ 4711-1286-0190). The left sidebar has sections for Dashboard, EC2 Global View, Events, Instances (with sub-options like Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations), Images (AMIs, AMI Catalog), Elastic Block Store (Volumes, Snapshots, Lifecycle Manager), Network & Security (Security Groups, Elastic IPs, Displacement Groups), and CloudShell/Feedback.

The main content area displays the "Image summary for ami-0778b9f2fa372f0fa". Key details include:

- AMI ID:** ami-0778b9f2fa372f0fa
- Image type:** machine
- Platform details:** Linux/UNIX
- Root device type:** EBS
- Architecture:** x86_64
- Usage operation:** RunInstances
- Source:** 471112860190/theeksha1backup
- Virtualization type:** hvm
- Creation date:** 2024-12-10T06:41:50.000Z
- Kernel ID:** -
- Deprecation time:** -
- Last launched time:** -
- Block devices:** /dev/xvda=snap-081258b5b484faea6.10: true,gp3
- Deregistration protection:** Disabled
- Allowed image:** -
- Source AMI ID:** ami-0c76bd4bd302b30ec
- Source AMI Region:** eu-west-2

Below the main summary, there are tabs for Permissions, Storage, and Tags. A note about image share permission states: "This image is only shared with account IDs, organizations, or OUs that you have specified." A warning message indicates: "Restrictions for sharing images publicly are managed using Block public access for AMIs setting under Data protection and security."

After Launching the backup server:

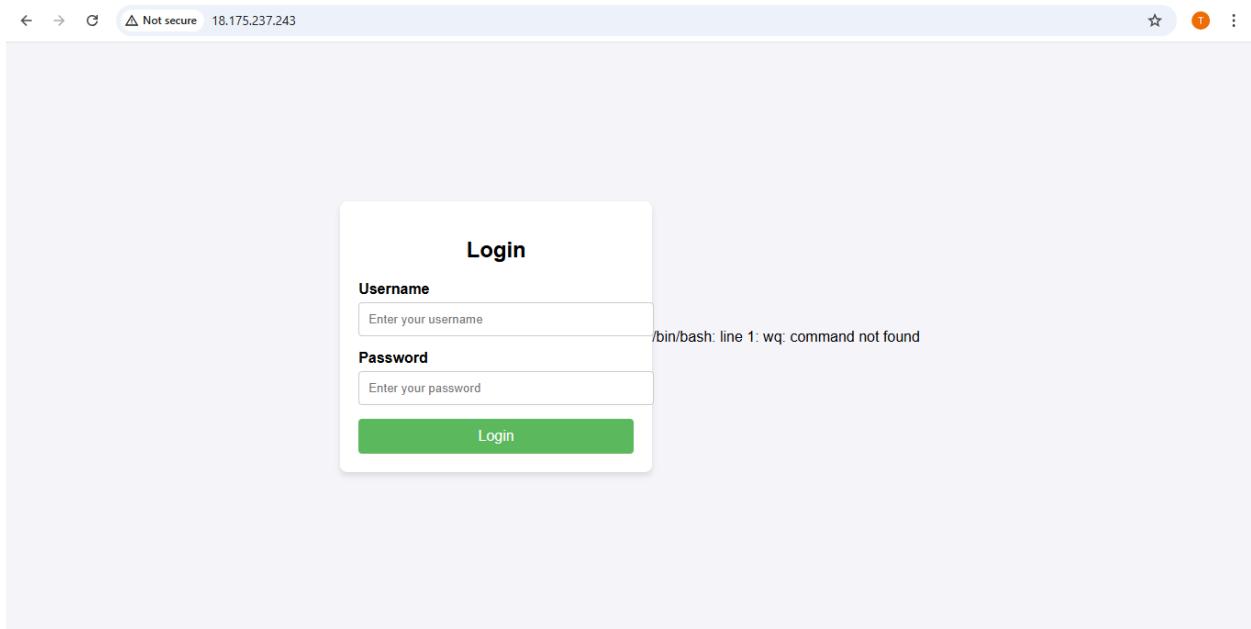
The screenshot shows the AWS EC2 Instance Summary page for instance i-0f3a94271e6819c01. The top navigation bar and sidebar are identical to the previous screenshot.

The main content area displays the "Instance summary for i-0f3a94271e6819c01 (theebackups)". Key details include:

- Instance ID:** i-0f3a94271e6819c01
- Public IPv4 address:** 18.175.237.243 | open address
- Private IPv4 addresses:** 10.0.1.55
- IPv6 address:** -
- Instance state:** Running
- Public IPv4 DNS:** -
- Hostname type:** IP name: ip-10-0-1-55.eu-west-2.compute.internal
- Private IP DNS name (IPv4 only):** ip-10-0-1-55.eu-west-2.compute.internal
- Elastic IP addresses:** -
- Answer private resource DNS name:** -
- Instance type:** t2.micro
- AWS Compute Optimizer finding:** User: arn:aws:iam::471112860190:user/Student44 is not authorized to perform: compute-optimizer:GetEnrollmentStatus on resource: * because no identity-based policy allows the compute-optimizer:GetEnrollmentStatus action
- Auto-assigned IP address:** 18.175.237.243 [Public IP]
- VPC ID:** vpc-0075af2e567a19c68 (theeksha-vpc)
- Subnet ID:** subnet-08079d838ca266d50 (theeksha-subnet 1)
- Auto Scaling Group name:** -
- IAM Role:** -
- Instance ARN:** arn:aws:ec2:eu-west-2:471112860190:instance/i-0f3a94271e6819c01
- Managed:** false
- IMDSv2:** Required

At the bottom, a note states: "User: arn:aws:iam::471112860190:user/Student44 is not authorized to perform: compute-optimizer:GetEnrollmentStatus on resource: * because no identity-based policy allows the compute-optimizer:GetEnrollmentStatus action".

Final Result:



Project 3: How to connect private server to the internet using NAT gateway(jumpserver/bastion host)

1. creating vpc

VPC ID: vpc-08dc2186c3d133a7e

State: Available

DNS resolution: Enabled

Main network ACL: acl-09644236533e97356

IPv6 CIDR: -

Network Address Usage metrics: Disabled

Block Public Access: Off

DHCP option set: dopt-03c748c4491bf4e18

IPv4 CIDR: 10.0.0.0/16

Route 53 Resolver DNS Firewall rule groups: -

DNS hostnames: Disabled

Main route table: rtb-0f21b60408b7456bf

IPv6 pool: -

Owner ID: 471112860190

2. creating internet gateway

Internet gateway ID: igw-08b63979e98417158

State: Attached

VPC ID: vpc-08dc2186c3d133a7e, theeksha-vpc

Owner: 471112860190

3.create public subnets

The screenshot shows the AWS VPC Subnet Details page. The subnet ID is subnet-0e862692d7cba45c9. The subnet ARN is arn:aws:ec2:ap-south-1:471112860190:subnet/subnet-0e862692d7cba45c9. The state is Available. The IPv4 CIDR is 10.0.1.0/24. The Availability Zone is ap-south-1a. The Route table is rtb-08efd183c264eafb0 | theeksha-public-rt. The Network ACL is acl-09644236533e97356. The Auto-assign IPv6 address is No. The IPv4 CIDR reservations are - (No). The IPv6 CIDR reservations are - (No). The Resource name DNS A record is - (Disabled). The Block Public Access is Off. The IPv6 CIDR association ID is - (No). The VPC is vpc-08dc2186c3d133a7e | theeksha-vpc. The Auto-assign public IPv4 address is No. The Outpost ID is - (No). The Hostname type is IP name. The Owner is - (Owner).

4.create private subnets

The screenshot shows the AWS VPC Subnet Details page. The subnet ID is subnet-0c614f67c9abe5c48. The subnet ARN is arn:aws:ec2:ap-south-1:471112860190:subnet/subnet-0c614f67c9abe5c48. The state is Available. The IPv4 CIDR is 10.0.3.0/24. The Availability Zone is ap-south-1a. The Route table is rtb-045515d86780700fc | theeksha-private-rt. The Network ACL is acl-09644236533e97356. The Auto-assign IPv6 address is No. The IPv4 CIDR reservations are - (No). The IPv6 CIDR reservations are - (No). The Resource name DNS A record is - (Disabled). The Block Public Access is Off. The IPv6 CIDR association ID is - (No). The VPC is vpc-08dc2186c3d133a7e | theeksha-vpc. The Auto-assign public IPv4 address is No. The Outpost ID is - (No). The Hostname type is IP name. The Owner is - (Owner).

5.create public route table

The screenshot shows the AWS VPC Route Tables page. The route table ID is rtb-08efd183c264eafb0, named "rtb-08efd183c264eafb0 / theeksha-public-rt". It has two routes: one to the internet gateway (igw-08b63979e98417158) and one to the local subnet.

Destination	Target	Status	Propagated
0.0.0.0/0	igw-08b63979e98417158	Active	No
10.0.0.0/16	local	Active	No

6.Create Private Route Table

The screenshot shows the AWS VPC Route Tables page. The route table ID is rtb-045515d86780700fc, named "rtb-045515d86780700fc / theeksha-private-rt". It has two routes: one to the internet gateway (igw-08b63979e98417158) and one to the local subnet.

Destination	Target	Status	Propagated
0.0.0.0/0	igw-08b63979e98417158	Active	No
10.0.0.0/16	local	Active	No

7.Create EC2 Public server Instance

The screenshot shows the AWS EC2 Instances page. The instance summary for i-046e7c6a08b082997 (theeksha-jumpserver) is displayed. Key details include:

- Instance ID:** i-046e7c6a08b082997
- Public IPv4 address:** 65.1.86.121 | [open address](#)
- Instance state:** Running
- Private IP DNS name (IPv4 only):** ip-10-0-1-4.ap-south-1.compute.internal
- Instance type:** t2.micro
- VPC ID:** vpc-08dc2186c3d133a7e (theeksha-vpc)

The sidebar on the left shows navigation links for Dashboard, EC2 Global View, Events, Instances, Images, and Elastic Block Store.

8.EC2 Private Server

The screenshot shows the AWS EC2 Instances page. The instance summary for i-011a4db56daaff28b (theeksha-privateserver1) is displayed. Key details include:

- Instance ID:** i-011a4db56daaff28b
- Public IPv4 address:** -
- Instance state:** Running
- Private IP DNS name (IPv4 only):** ip-10-0-3-206.ap-south-1.compute.internal
- Instance type:** t2.micro
- VPC ID:** vpc-08dc2186c3d133a7e (theeksha-vpc)

The sidebar on the left shows navigation links for Dashboard, EC2 Global View, Events, Instances, Images, and Elastic Block Store.

9.NAT gateways

The screenshot shows the AWS VPC dashboard with the following details for a NAT gateway:

NAT gateway ID	Connectivity type	State	State message
nat-01b43b7248cb75a85	Public	Available	-
NAT gateway ARN	Primary public IPv4 address	Primary private IPv4 address	Primary network interface ID
arn:aws:ec2:ap-south-1:471112860190:natgateway/nat-01b43b7248cb75a85	35.154.182.195	10.0.1.148	eni-085144c04b44fe88e
Subnet	Subnet	Created	Deleted
vpc-08dc2186c3d133a7e / theeksha-vpc	subnet-0e862692d7cba45c9 / theeksha-publicsubnet-1	Thursday, December 12, 2024 at 19:57:53 GMT+5:30	-

Below the main details, there are tabs for "Secondary IPv4 addresses", "Monitoring", and "Tags". The "Secondary IPv4 addresses" tab is selected, showing a search bar and a button to "Edit secondary IPv4 address associations".

10.Public SSH

The screenshot shows the "Connect to instance" page for an EC2 instance. The instance ID is i-046e7c6a08b082997 (theeksha-jumpserver). The "SSH client" tab is selected.

Instructions for connecting via SSH:

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is teeksha-keypair.pem.
3. Run this command, if necessary, to ensure your key is not publicly viewable.
chmod 400 "teeksha-keypair.pem"
4. Connect to your instance using its Public IP:
65.1.86.121

Example command:

```
ssh -i "teeksha-keypair.pem" ec2-user@65.1.86.121
```

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

11.private SSH

The screenshot shows the AWS EC2 Connect to instance page. At the top, there's a navigation bar with the AWS logo, a search bar, and account information ('Student44 @ 4711-1286-0190'). Below the navigation is a breadcrumb trail: EC2 > Instances > i-011a4db56daaff28b > Connect to instance. The main section is titled 'Connect to instance' with a 'Info' link. It says 'Connect to your instance i-011a4db56daaff28b (theeksha-privateserver1) using any of these options'. There are four tabs: 'EC2 Instance Connect', 'Session Manager', 'SSH client' (which is selected), and 'EC2 serial console'. Under 'Instance ID', it shows 'i-011a4db56daaff28b (theeksha-privateserver1)'. Below this is a numbered list of steps:

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is 'theeksh-privatekeypair.pem'
3. Run this command, if necessary, to ensure your key is not publicly viewable.
 `chmod 400 "theeksh-privatekeypair.pem"
4. Connect to your instance using its Private IP:
 `10.0.3.206`

Below the list is an 'Example:' section with a command line example:
 `ssh -i "theeksh-privatekeypair.pem" ec2-user@10.0.3.206`

A note in a callout box says: **Note:** In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

10.Command Prompt

The screenshot shows a Windows Command Prompt window. The title bar says 'root@ip-10-0-1-4~'. The content of the window is as follows:

```
Microsoft Windows [Version 10.0.19045.3271]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Kudkuli>cd Downloads

C:\Users\Kudkuli\Downloads>ssh -i "teeksha-keypair.pem" ec2-user@65.1.86.121
Last login: Thu Dec 12 05:29:01 2024 from 152.58.240.198
[ec2-user@ip-10-0-1-4 ~]$ sudo su
[root@ip-10-0-1-4 ec2-user]# cd
[root@ip-10-0-1-4 ~]# ssh -i "theeksh-privatekeypair.pem" ec2-user@10.0.3.206
Load key "theeksh-privatekeypair.pem": error in libcrypto
ec2-user@10.0.3.206: Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
[root@ip-10-0-1-4 ~]# ssh -i "theeksh-privatekeypair.pem" ec2-user@10.0.3.206
Load key "theeksh-privatekeypair.pem": error in libcrypto
ec2-user@10.0.3.206: Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
[root@ip-10-0-1-4 ~]# vi theeksh-privatekeypair.pem
[root@ip-10-0-1-4 ~]# [root@ip-10-0-1-4 ~]# ssh -i "theeksh-privatekeypair.pem" ec2-user@10.0.3.206
Load key "theeksh-privatekeypair.pem": error in libcrypto
```

11.pinging to google

```
root@ip-10-0-1-4:~# ping www.google.com
The authenticity of host '10.0.3.12 (10.0.3.12)' can't be established.
ED25519 key fingerprint is SHA256:UJ92/GezpKI9t826OTjoZ/b7NkFF7s64L4jMilaM.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.0.3.12' (ED25519) to the list of known hosts.
Load key "theeksh-privatekeypair.pem": error in libcrypto
ec2-user@10.0.3.12: Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
[root@ip-10-0-1-4 ~]# sudo su
[root@ip-10-0-1-4 ~]# cd
[root@ip-10-0-1-4 ~]# ping www.google.com
PING www.google.com (142.250.199.164) 56(84) bytes of data.
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=1 ttl=57 time=2.04 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=2 ttl=57 time=2.37 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=3 ttl=57 time=2.27 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=4 ttl=57 time=2.44 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=5 ttl=57 time=2.13 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=6 ttl=57 time=2.44 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=7 ttl=57 time=2.67 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=8 ttl=57 time=2.69 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=9 ttl=57 time=2.73 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=10 ttl=57 time=2.34 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=11 ttl=57 time=2.40 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=12 ttl=57 time=2.23 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=13 ttl=57 time=2.39 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=14 ttl=57 time=2.61 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=15 ttl=57 time=2.52 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=16 ttl=57 time=2.40 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=17 ttl=57 time=2.08 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=18 ttl=57 time=2.08 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=19 ttl=57 time=2.31 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=20 ttl=57 time=2.40 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=21 ttl=57 time=2.49 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=22 ttl=57 time=2.09 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=23 ttl=57 time=2.43 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=24 ttl=57 time=2.51 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=25 ttl=57 time=2.11 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=26 ttl=57 time=2.31 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=27 ttl=57 time=2.10 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=28 ttl=57 time=2.56 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=29 ttl=57 time=2.11 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=30 ttl=57 time=2.09 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=31 ttl=57 time=2.10 ms
64 bytes from bom@7s37-in-f4.1e100.net (142.250.199.164): icmp_seq=32 ttl=57 time=2.46 ms
```

4.Hosting a static website using S3 bucket

1.create S3 bucket

Steps:

- 1. Go to search bar and type s3. Click on s3.**
- 2. In S3 dashboard, go to general purpose buckets and click on create bucket button.**
- 3. In general configuration, select bucket type as general purpose and give name as anusha04.**
- 4. Click on create bucket button. Your bucket is created. Uploading a file:**

Steps:

- 1. Click on created bucket.**
- 2. Bucket window gets opened and click on upload button.**
- 3. In upload window, select files and folders and click on add files and select the file you want to add.**
- 4. Then click on upload. Your file is uploaded Static website hosting:**

Steps:

- 1. Select the properties, go to static website hosting and click on edit.**
- 2. Give index document name as file name that is dailyping.html and click on save changes button.**

The screenshot shows the AWS S3 Buckets page. At the top, there's a search bar and a 'Create bucket' button. Below that, a table lists 55 general purpose buckets. The columns are 'Name', 'AWS Region', 'IAM Access Analyzer', and 'Creation date'. Each row contains a link to 'View analyzer' for that specific bucket.

Name	AWS Region	IAM Access Analyzer	Creation date
shravx123	Europe (London) eu-west-2	View analyzer for eu-west-2	December 11, 2024, 09:54:00 (UTC+05:30)
sjp8904	Europe (Frankfurt) eu-central-1	View analyzer for eu-central-1	December 11, 2024, 09:55:04 (UTC+05:30)
sneha36	Asia Pacific (Seoul) ap-northeast-2	View analyzer for ap-northeast-2	December 11, 2024, 09:51:42 (UTC+05:30)
soora123	Europe (Paris) eu-west-3	View analyzer for eu-west-3	December 11, 2024, 09:54:26 (UTC+05:30)
th9bucket	Europe (London) eu-west-2	View analyzer for eu-west-2	December 11, 2024, 09:51:20 (UTC+05:30)
ullas2002	South America (São Paulo) sa-east-1	View analyzer for sa-east-1	December 11, 2024, 09:51:21 (UTC+05:30)
uttam987	Canada (Central) ca-central-1	View analyzer for ca-central-1	December 11, 2024, 09:53:30 (UTC+05:30)
vidhisha123	Europe (Ireland) eu-west-1	View analyzer for eu-west-1	December 11, 2024, 09:57:38 (UTC+05:30)
yathish2001	South America (São Paulo) sa-east-1	View analyzer for sa-east-1	December 11, 2024, 09:51:43 (UTC+05:30)

2.Edit block policy

Steps:

1. Go to google browser and type bucket policy for static website.
2. You will get setting permission for website access and click on it.
3. You will get add a bucket policy and copy the code from the editor.

The screenshot shows the 'Edit bucket policy' page for the 'th9bucket' bucket. It includes sections for 'Bucket policy', 'Policy examples', 'Policy generator', 'Bucket ARN' (arn:aws:s3:::th9bucket), and a large 'Policy' editor area containing the following JSON code:

```
1  {
2      "Version": "2012-10-17",
3      "Statement": [
4          {
5              "Id": "PublicReadGetObject",
6              "Effect": "Allow",
7              "Principal": "*",
8              "Action": "s3:GetObject",
9              "Resource": "arn:aws:s3:::th9bucket/*"
10         }
11     ]
12 }
```

On the right side, there are buttons for 'Edit statement', 'Remove', 'Add actions', 'Choose a service' (with a 'Filter services' dropdown), and lists for 'Included' (S3) and 'Available' (AI Operations, AMP, API Gateway, API Gateway V2).

3.Uploading file

The screenshot shows the AWS S3 console interface. At the top, there's a navigation bar with the AWS logo, a search bar, and account information ('Student44 @ 4711-1286-0190'). Below the navigation bar, the path 'Amazon S3 > Buckets > th9bucket' is shown. The main area is titled 'th9bucket info'. Under the 'Objects' tab, there's a table listing one object: 'index.html' (Type: html, Last modified: December 11, 2024, 10:11:01 (UTC+05:30), Size: 524.0 B, Storage class: Standard). There are various actions available for the object, including Copy S3 URI, Copy URL, Download, Open, Delete, Actions, Create folder, and Upload.

4.Edit block public access(bucket settings)

Steps:

1. Go to permission, select block public access and click on edit.
2. Under block public access (bucket setting), uncheck the block all public access and click on save changes button.

The screenshot shows the 'Edit Block public access (bucket settings)' page. The title is 'Edit Block public access (bucket settings) info'. Below the title, there's a section titled 'Block public access (bucket settings)' with a detailed description of how it applies to buckets and objects. It lists five options under 'Block all public access':

- Block all public access**: Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.
- Block public access to buckets and objects granted through new access control lists (ACLs)**: S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.
- Block public access to buckets and objects granted through any access control lists (ACLs)**: S3 will ignore all ACLs that grant public access to buckets and objects.
- Block public access to buckets and objects granted through new public bucket or access point policies**: S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.
- Block public and cross-account access to buckets and objects through any public bucket or access point policies**: S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

At the bottom right, there are 'Cancel' and 'Save changes' buttons.

5.static website hosting url

Steps:

1. In properties, under static website hosting, copy the bucket website endpoint url and paste it on google browser.

The screenshot shows the AWS S3 Bucket Properties page for a bucket named 'th9bucket'. Under the 'Static website hosting' section, it is enabled and set to 'Bucket hosting'. The 'Bucket website endpoint' is listed as <http://th9bucket.s3-website.eu-west-2.amazonaws.com>. A note recommends using AWS Amplify Hosting for static website hosting, with a link to 'Create Amplify app'.

6.Final result



Welcome to My Website

This is a simple HTML webpage.

[Visit Example](#)

- Item 1
- Item 2
- Item 3

[Click Me](#)

Project 5: Launching the website using load balancer DNS Name

1.Creating vpc

The screenshot shows the AWS VPC dashboard with the following details for the VPC:

VPC ID	State	Block Public Access	DNS hostnames
vpc-08dc2186c3d133a7e	Available	Off	Disabled
DNS resolution	Tenancy	DHCP option set	Main route table
Enabled	default	dopt-03c748c4491bf4e18	rtb-0f21b60408b7456bf
Main network ACL	Default VPC	IPv4 CIDR	IPv6 pool
acl-09644236533e97356	No	10.0.0.0/16	-
IPv6 CIDR (Network border group)	Network Address Usage metrics	Route 53 Resolver DNS Firewall rule groups	Owner ID
-	Disabled	-	471112860190

2.Creating Subnets

Public subnet 1

The screenshot shows the AWS VPC dashboard with the following details for the public subnet:

Subnet ID	Subnet ARN	State	Block Public Access
subnet-0e862692d7cba45c9	arn:aws:ec2:ap-south-1:471112860190:subnet/subnet-0e862692d7cba45c9	Available	Off
IPv4 CIDR	IPv6 CIDR	IPv6 CIDR association ID	
10.0.1.0/24	-	-	
Availability Zone	Available IPv4 addresses	Network border group	VPC
ap-south-1a	248	ap-south-1	vpc-08dc2186c3d133a7e theeksha-vpc
Route table	Availability Zone ID	Default subnet	Auto-assign public IPv4 address
rtb-08efd183c264efb0 theeksha-public-rt	aps1-az1	No	No
Network ACL	Customer-owned IPv4 pool	Outpost ID	
acl-09644236533e97356	-	-	
Auto-assign IPv6 address	Auto-assign customer-owned IPv4 address	Hostname type	
No	No	IP name	
IPv4 CIDR reservations	IPv6 CIDR reservations	Owner	
-	-	-	

Public subnet 2

The screenshot shows the AWS VPC Subnet Details page for a public subnet. The subnet ID is subnet-037054081d7b54dc2, with an IPv4 CIDR of 10.0.2.0/24. It is located in the ap-south-1b availability zone and associated with the route table rtb-08efd183c264efb0 from the theeksha-public-rt. The subnet is in an available state and has 251 available IPv4 addresses. The Network ACL is acl-09644236533e97356. Auto-assign IPv6 address is set to No, and IPv4 CIDR reservations are also set to No. The subnet does not have a DNS A record. Block Public Access is off, and there is no IPv6 CIDR association ID. The VPC is vpc-08dc2186c3d133a7e, and the Outpost ID is listed as -. The Hostname type is IP name, and the Owner is listed as -. The subnet ARN is arn:aws:ec2:ap-south-1:47112860190:subnet/subnet-037054081d7b54dc2.

Private subnet 1

The screenshot shows the AWS VPC Subnet Details page for a private subnet. The subnet ID is subnet-0c614f67c9abe5c48, with an IPv4 CIDR of 10.0.3.0/24. It is located in the ap-south-1a availability zone and associated with the route table rtb-045515d86780700fc from the theeksha-private-rt. The subnet is in an available state and has 249 available IPv4 addresses. The Network ACL is acl-09644236533e97356. Auto-assign IPv6 address is set to No, and IPv4 CIDR reservations are also set to No. The subnet does not have a DNS A record. Block Public Access is off, and there is no IPv6 CIDR association ID. The VPC is vpc-08dc2186c3d133a7e, and the Outpost ID is listed as -. The Hostname type is IP name, and the Owner is listed as -. The subnet ARN is arn:aws:ec2:ap-south-1:47112860190:subnet/subnet-0c614f67c9abe5c48.

Private subnet 2

The screenshot shows the AWS VPC Subnet Details page. The subnet ID is subnet-0bd6b851480a83294, located in the ap-south-1b availability zone, with an IPv4 CIDR of 10.0.4.0/24. The route table is rtb-045515d86780700fc, which is associated with the VPC vpc-08dc2186c3d133a7e. The subnet is currently available and has 251 available IPv4 addresses. It is not connected to any network border groups or auto-assigned IPv6 addresses. The network ACL is acl-09644236533e97356. The subnet does not have an auto-assigned customer-owned IPv4 pool or IPv6-only associations. It is DNS64-enabled and owned by the user.

3.Route table

The screenshot shows the AWS VPC Route Table Details page. The route table ID is rtb-045515d86780700fc, associated with the VPC vpc-08dc2186c3d133a7e. It has no main entry and 2 explicit subnet associations. The routes section shows two entries: one for 0.0.0.0/0 targeting the igw-08b63979e98417158 internet gateway, and another for 10.0.0.0/16 targeting the local subnet.

4.IGW

The screenshot shows the AWS VPC dashboard with the following details:

- Internet gateway ID:** igw-08b63979e98417158
- State:** Attached
- VPC ID:** vpc-08dc2186c3d133a7e
- Owner:** 471112860190

Tags:

Key	Value
Name	theeksha-igw

5.Servers

The screenshot shows the AWS EC2 Instances page with the following details:

Instances (3/7) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability
theeksha2-pri...	i-0da7d8a0c3b6cacb3	Running	t2.micro	2/2 checks passed	View alarms +	ap-south-1
theeksha-jum...	i-046e7c6a08b082997	Running	t2.micro	2/2 checks passed	View alarms +	ap-south-1
theeksha-priv...	i-011a4db56daaff28b	Running	t2.micro	2/2 checks passed	View alarms +	ap-south-1

3 instances selected

Monitoring

Configure CloudWatch agent

[EC2](#) > [Instances](#) > i-046e7c6a08b082997

Dashboard EC2 Global View Events

Instances

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- Reserved Instances
- Dedicated Hosts
- Capacity Reservations

Images

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Elastic Block Store

- Volumes

Instance summary for i-046e7c6a08b082997 (theeksha-jumpserver) [Info](#)

[Connect](#) [Instance state](#) [Actions](#)

Updated less than a minute ago

Instance ID i-046e7c6a08b082997	Public IPv4 address 65.1.86.121 open address	Private IPv4 addresses 10.0.1.4
IPv6 address -	Instance state Running	Public IPv4 DNS -
Hostname type IP name: ip-10-0-1-4.ap-south-1.compute.internal	Private IP DNS name (IPv4 only) ip-10-0-1-4.ap-south-1.compute.internal	Elastic IP addresses -
Answer private resource DNS name -	Instance type t2.micro	AWS Compute Optimizer finding ? User: arn:aws:iam::471112860190:user/Student44 is not authorized to perform: compute-optimizer:GetEnrollmentStatus on resource: * because no identity-based policy allows the compute-optimizer:GetEnrollmentStatus action Retry
Auto-assigned IP address 65.1.86.121 [Public IP]	VPC ID vpc-08dc2186c3d133a7e (theeksha-vpc)	

[Search](#) [Alt+S]

[EC2](#) > [Instances](#) > i-011a4db56daaff28b

Dashboard EC2 Global View Events

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Instance summary for i-011a4db56daaff28b (theeksha-privateserver1) [Info](#)

[Connect](#) [Instance state](#) [Actions](#)

Updated less than a minute ago

Instance ID i-011a4db56daaff28b	Public IPv4 address -	Private IPv4 addresses 10.0.3.206
IPv6 address -	Instance state Running	Public IPv4 DNS -
Hostname type IP name: ip-10-0-3-206.ap-south-1.compute.internal	Private IP DNS name (IPv4 only) ip-10-0-3-206.ap-south-1.compute.internal	Elastic IP addresses -
Answer private resource DNS name -	Instance type t2.micro	AWS Compute Optimizer finding ? User: arn:aws:iam::471112860190:user/Student44 is not authorized to perform: compute-optimizer:GetEnrollmentStatus on resource: * because no identity-based policy allows the compute-optimizer:GetEnrollmentStatus action Retry
Auto-assigned IP address -	VPC ID vpc-08dc2186c3d133a7e (theeksha-vpc)	

[Search](#) [Alt+S]

[EC2](#) > [Instances](#) > i-0da7d8a0c3b6cacb3

Dashboard EC2 Global View Events

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Instance summary for i-0da7d8a0c3b6cacb3 (theeksha2-privateserver) [Info](#)

[Connect](#) [Instance state](#) [Actions](#)

Updated less than a minute ago

Instance ID i-0da7d8a0c3b6cacb3	Public IPv4 address -	Private IPv4 addresses 10.0.3.12
IPv6 address -	Instance state Running	Public IPv4 DNS -
Hostname type IP name: ip-10-0-3-12.ap-south-1.compute.internal	Private IP DNS name (IPv4 only) ip-10-0-3-12.ap-south-1.compute.internal	Elastic IP addresses -
Answer private resource DNS name -	Instance type t2.micro	AWS Compute Optimizer finding ? User: arn:aws:iam::471112860190:user/Student44 is not authorized to perform: compute-optimizer:GetEnrollmentStatus on resource: * because no identity-based policy allows the compute-optimizer:GetEnrollmentStatus action Retry
Auto-assigned IP address -	VPC ID vpc-08dc2186c3d133a7e (theeksha-vpc)	

6.NAT

The screenshot shows the AWS VPC dashboard with the NAT gateways section selected. A specific NAT gateway, "nat-01b43b7248cb75a85 / theeksha-natgateway", is viewed. The "Details" tab is active, displaying the following information:

NAT gateway ID	Connectivity type	State	State message
nat-01b43b7248cb75a85	Public	Available	-
NAT gateway ARN	Primary public IPv4 address	Primary private IPv4 address	Primary network interface ID
arn:aws:ec2:ap-south-1:471112860190:natgateway/nat-01b43b7248cb75a85	35.154.182.195	10.0.1.148	eni-085144c04b44fe88e
VPC	Subnet	Created	Deleted
vpc-08dc2186c3d133a7e / theeksha-vpc	subnet-0e862692d7cba45c9 / theeksha-publicsubnet-1	Thursday, December 12, 2024 at 19:57:53 GMT+5:30	-

Below the details, there are tabs for "Secondary IPv4 addresses", "Monitoring", and "Tags". The "Secondary IPv4 addresses" tab is selected, showing a search bar and a list of secondary IP addresses.

7.Load balance

The screenshot shows the AWS EC2 Load balancers section with a load balancer named "theeksha01". The "Details" tab is active, displaying the following information:

Load balancer type	Status	VPC	Load balancer IP address type
Application	Active	vpc-08dc2186c3d133a7e	IPv4
Scheme	Hosted zone	Availability Zones	Date created
Internet-facing	ZP97RAFLXTNZK	subnet-037054081d7b54dc2 ap-south-1b (aps1-az3) subnet-0e862692d7cba45c9 ap-south-1a (aps1-az1)	December 12, 2024, 21:42 (UTC+05:30)

Below the details, there are tabs for "Listeners and rules", "Network mapping", "Resource map - new", "Security", "Monitoring", "Integrations", and "Attrib". The "Listeners and rules" tab is selected, showing a list of 1 rule and buttons for "Manage rules", "Manage listener", and "Add listener".

8.Target

The screenshot shows the AWS EC2 Target Groups console. The left sidebar has sections for Snapshots, Lifecycle Manager, Network & Security (Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces), Load Balancing (Load Balancers, Target Groups, Trust Stores), Auto Scaling (Auto Scaling Groups), and Settings. The main area is titled 'theeksha-tg02' and contains a 'Details' section with the ARN: arn:aws:elasticloadbalancing:ap-south-1:471112860190:targetgroup/theeksha-tg02/684da93fcc3e6243. It shows the Target type as Instance (HTTP: 80), IP address type as IPv4, and Load balancer as 'theeksha01'. Below this, there's a summary table with columns: Total targets (2), Healthy (0), Unhealthy (2), Unused (0), Initial (0), and Draining (0). A note says '0 Anomalous'. At the bottom, tabs for Targets, Monitoring, Health checks, Attributes, and Tags are visible.

9.Security groups

The screenshot shows the AWS EC2 Security Groups console. The left sidebar has sections for 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), and Elastic Block Store (Volumes). The main area is titled 'sg-005ad9e8bbb329372 - theeksha-securitygroup' and contains a 'Details' section with the Security group name as 'theeksha-securitygroup', Security group ID as 'sg-005ad9e8bbb329372', Description as 'theeksha-securitygroup', VPC ID as 'vpc-08dc2186c3d133a7e', Owner as '471112860190', Inbound rules count as '3 Permission entries', and Outbound rules count as '1 Permission entry'. Below this, tabs for Inbound rules, Outbound rules, Sharing - new, VPC associations - new, and Tags are visible. A green notification bar at the top says 'Inbound security group rules successfully modified on security group (sg-005ad9e8bbb329372 | theeksha-securitygroup)' with a 'Details' link.

10.command prompt

```
>Last login: Thu Dec 12 14:36:02 2024 from 152.58.237.130
[ec2-user@ip-10-0-1-4 ~]$ sudo su
[ec2-user@ip-10-0-1-4 ec2-user]# cd
[ec2-user@ip-10-0-1-4 ~]# systemctl start httpd
[ec2-user@ip-10-0-1-4 ~]# systemctl enable httpd
[ec2-user@ip-10-0-1-4 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
     Active: active (running) since Thu 2024-12-12 04:49:36 UTC; 1h ago
       Docs: man:httpd.service(8)
      Main PID: 27186 (httpd)
        Status: "Total requests: 145; Idle/Busy workers 100/0;Requests/sec: 0.00341; Bytes served/sec: 2 B/sec"
         Tasks: 230 (limit: 1111)
        Memory: 19.5M
          CPU: 27.359s
         CGroup: /system.slice/httpd.service
                 ├─27186 /usr/sbin/httpd -DFOREGROUND
                 ├─27187 /usr/sbin/httpd -DFOREGROUND
                 ├─27188 /usr/sbin/httpd -DFOREGROUND
                 ├─27189 /usr/sbin/httpd -DFOREGROUND
                 ├─27190 /usr/sbin/httpd -DFOREGROUND
                 └─41661 /usr/sbin/httpd -DFOREGROUND

Dec 12 04:49:36 ip-10-0-1-4.ap-south-1.compute.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Dec 12 04:49:36 ip-10-0-1-4.ap-south-1.compute.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Dec 12 04:49:36 ip-10-0-1-4.ap-south-1.compute.internal httpd[27186]: Server configured, listening on: port 80
[ec2-user@ip-10-0-1-4 ~]#
```

```
Command Prompt x + v - o x

Complete!
[root@ip-10-0-3-140 ~]# vi index.html
[root@ip-10-0-3-140 ~]# cd /var/www/html
[root@ip-10-0-3-140 html]# vi index.html
[root@ip-10-0-3-140 html]# [New] 1L, 49B written
[root@ip-10-0-3-140 html]# systemctl start httpd
Failed to start httpd.service: Unit httpd.service not found.
[root@ip-10-0-3-140 html]# systemctl start httpd
[root@ip-10-0-3-140 html]# systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[root@ip-10-0-3-140 html]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
     Active: active (running) since Fri 2024-12-13 15:57:58 UTC; 22s ago
       Docs: man:httpd.service(8)
      Main PID: 26314 (httpd)
        Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec: 0 B/sec"
         Tasks: 177 (limit: 1111)
        Memory: 13.0M
          CPU: 64ms
         CGroup: /system.slice/httpd.service
                 ├─26314 /usr/sbin/httpd -DFOREGROUND
                 ├─26315 /usr/sbin/httpd -DFOREGROUND
                 ├─26316 /usr/sbin/httpd -DFOREGROUND
                 ├─26317 /usr/sbin/httpd -DFOREGROUND
                 └─26318 /usr/sbin/httpd -DFOREGROUND

Dec 13 15:57:58 ip-10-0-3-140.eu-west-2.compute.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Dec 13 15:57:58 ip-10-0-3-140.eu-west-2.compute.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Dec 13 15:57:58 ip-10-0-3-140.eu-west-2.compute.internal httpd[26314]: Server configured, listening on: port 80
[root@ip-10-0-3-140 html]# exit
exit
[ec2-user@ip-10-0-3-140 ~]# exit
logout
Connection to 10.0.3.140 closed.
[root@ip-10-0-1-137 ~]# ssh -i "anjanaprivate-keypair.pem" ec2-user@10.0.4.105ssh -i "anjanaprivate-keypair.pem" ec2-user@10.0.4.105
ssh: Could not resolve hostname 10.0.4.105ssh: Name or service not known
[root@ip-10-0-1-137 ~]# ssh -i "anjanaprivate-keypair.pem" ec2-user@10.0.4.105ssh -i "anjanaprivate-keypair.pem" ec2-user@10.0.4.105
ssh: Could not resolve hostname 10.0.4.105ssh: Name or service not known
[root@ip-10-0-1-137 ~]# ssh -i "anjanaprivate-keypair.pem" ec2-user@10.0.4.105
The authenticity of host '10.0.4.105 (10.0.4.105)' can't be established.
ED25519 key fingerprint is SHA256:UujnxTVgZ5RBEfMo/Gcoqx78L18IELBiM076MDTHFI.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.0.4.105' (ED25519) to the list of known hosts.
, #_
```

```

Command Prompt

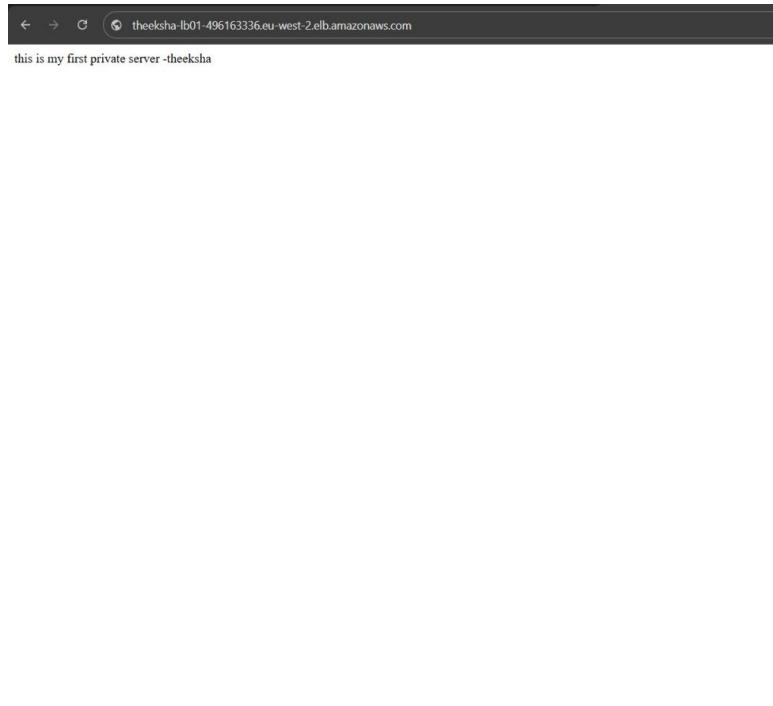
Verifying : apr-1.7.2-2.amzn2023.0.2.x86_64 1/12
Verifying : apr-util-1.3-1.amzn2023.0.1.x86_64 2/12
Verifying : apr-util-openssl-1.6.3-1.amzn2023.0.1.x86_64 3/12
Verifying : generic-logos-htpd-18.0.0-12.amzn2023.0.3.noarch 4/12
Verifying : httpd-2.4.62-1.amzn2023.x86_64 5/12
Verifying : httpd-core-2.4.62-1.amzn2023.x86_64 6/12
Verifying : httpd-filesystem-2.4.62-1.amzn2023.noarch 7/12
Verifying : httpd-tools-2.4.62-1.amzn2023.x86_64 8/12
Verifying : libbrotli-1.0.9-4.amzn2023.0.2.x86_64 9/12
Verifying : mailcap-2.1.49-3.amzn2023.0.3.noarch 10/12
Verifying : mod_http2-2.0.27-1.amzn2023.0.3.x86_64 11/12
Verifying : mod_lua-2.4.62-1.amzn2023.x86_64 12/12

Installed:
apr-1.7.2-2.amzn2023.0.2.x86_64
apr-util-openssl-1.6.3-1.amzn2023.0.1.x86_64
httpd-2.4.62-1.amzn2023.x86_64
httpd-filesystem-2.4.62-1.amzn2023.noarch
libbrotli-1.0.9-4.amzn2023.0.2.x86_64
mod_http2-2.0.27-1.amzn2023.0.3.x86_64
mod_lua-2.4.62-1.amzn2023.x86_64

Complete!
[root@ip-10-0-4-105 ~]# cd /var/www/html
[root@ip-10-0-4-105 html]# vi index.html
[root@ip-10-0-4-105 html]# systemctl start httpd
[root@ip-10-0-4-105 html]# systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[root@ip-10-0-4-105 html]# systemctl status httpd
● httpd.service - The Apache HTTP Server
    Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
      Active: active (running) since Fri 2024-12-13 16:04:38 UTC; 2min 38s ago
        Docs: man:httpd.service(8)
     Main PID: 26426 (httpd)
       Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec: 0 B/sec"
          Tasks: 177 (limit: 1111)
         Memory: 13.0M
            CPU: 143ms
       CGroup: /system.slice/httpd.service
               ├─26426 /usr/sbin/httpd -DFOREGROUND
               ├─26447 /usr/sbin/httpd -DFOREGROUND
               ├─26448 /usr/sbin/httpd -DFOREGROUND
               ├─26449 /usr/sbin/httpd -DFOREGROUND
               └─26450 /usr/sbin/httpd -DFOREGROUND

Dec 13 16:04:38 ip-10-0-4-105.eu-west-2.compute.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Dec 13 16:04:38 ip-10-0-4-105.eu-west-2.compute.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Dec 13 16:04:38 ip-10-0-4-105.eu-west-2.compute.internal httpd[26426]: Server configured, listening on: port 80

```



← → ⌂ theeksha-lb01-496163336.eu-west-2.elb.amazonaws.com

this is my second private server -theeksha

Project 6:How to create repository in GITHUB

1.commands in command prompt to create repository in github

```
root@ip-10-0-1-189:~# ssh -i "teeksha-keypair.pem" ec2-user@13.126.114.210
Last login: Thu Dec 12 10:04:12 2024 from 152.58.237.65
[ec2-user@ip-10-0-1-189 ~]$ sudo su
[root@ip-10-0-1-189 ~]# cd
[root@ip-10-0-1-189 ~]# yum install git -y
Last metadata expiration check: 8:32:04 ago on Thu Dec 12 08:20:24 2024.
Package git-2.40.1-1.amzn2023.0.3.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-10-0-1-189 ~]# cd /
[root@ip-10-0-1-189 /]# mkdir theeksha
mkdir: cannot create directory 'theeksha': File exists
[root@ip-10-0-1-189 /]# mkdir theekshaa
[root@ip-10-0-1-189 /]# cd theekshaa
[root@ip-10-0-1-189 theekshaa]# git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /theekshaa/.git/
[root@ip-10-0-1-189 theekshaa]# 

root@ip-10-0-1-189:~# 
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint: git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint: git branch -m <name>
Initialized empty Git repository in /theekshaa/.git/
[root@ip-10-0-1-189 theekshaa]# -a
bash: -a: command not found
[root@ip-10-0-1-189 theekshaa]#
[root@ip-10-0-1-189 theekshaa]# ls -a
... .git
[root@ip-10-0-1-189 theekshaa]# cd .git
[root@ip-10-0-1-189 .git]# ls
HEAD branches config description hooks info objects refs
[root@ip-10-0-1-189 .git]# cd ..
[root@ip-10-0-1-189 theekshaa]# touch sample.txt
[root@ip-10-0-1-189 theekshaa]# ls
sample.txt
[root@ip-10-0-1-189 theekshaa]# git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    sample.txt

nothing added to commit but untracked files present (use "git add" to track)
[root@ip-10-0-1-189 theekshaa]# git add .
[root@ip-10-0-1-189 theekshaa]# git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   sample.txt

[root@ip-10-0-1-189 theekshaa]# git commit -m "file is created"
```

```
root@ip-10-0-1-189:~# git commit -m "file is created"
[master (root-commit) 7ae3051] file is created
Committer: root <root@ip-10-0-1-189.ap-south-1.compute.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:
git config --global --edit
After doing this, you may fix the identity used for this commit with:
git commit --amend --reset-author
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 sample.txt
[root@ip-10-0-1-189 theekshaal]# vi sample.txt
[root@ip-10-0-1-189 theekshaal]# git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   sample.txt

no changes added to commit (use "git add" and/or "git commit -a")
[root@ip-10-0-1-189 theekshaal]# git add .
Nothing specified, nothing added.
hint: Maybe you wanted to say 'git add .'?
hint: Turn this message off by running
hint: 'git config advice.addEmptyPathspec false'
[root@ip-10-0-1-189 theekshaal]# git add*
git: 'add*' is not a git command. See 'git --help'.
The most similar command is
  add
[root@ip-10-0-1-189 theekshaal]# git add *

On branch master
nothing to commit, working tree clean
[root@ip-10-0-1-189 theekshaal]# git log
commit c6abb11c84bc282442859d88bedf0ad8b05a02d7 (HEAD -> master)
Author: root <root@ip-10-0-1-189.ap-south-1.compute.internal>
Date:   Thu Dec 12 17:03:53 2024 +0000

  file is created updated

commit 7ae3051fb45c5645b981671acf7ab850bc75
Author: root <root@ip-10-0-1-189.ap-south-1.compute.internal>
Date:   Thu Dec 12 16:58:35 2024 +0000

  file is created
[root@ip-10-0-1-189 theekshaal]# ls
sample.txt
[root@ip-10-0-1-189 theekshaal]# git init
Reinitialized existing Git repository in /theekshaal/.git/
[root@ip-10-0-1-189 theekshaal]# git add README.md
fatal: pathspec 'README.md' did not match any files
[root@ip-10-0-1-189 theekshaal]# git branch -M main
[root@ip-10-0-1-189 theekshaal]# git remote add origin https://github.com/theeksha30-bot/demo-.git
[root@ip-10-0-1-189 theekshaal]# git push -u origin main
Username for 'https://github.com': theeksha30-bot
Password for 'https://theeksha30-bot@github.com':
remote: Support for password authentication was removed on August 13, 2021.
remote: Please see https://docs.github.com/get-started/getting-started-with-git/about-remote-repositories#cloning-with-https-urls for information on currently recommended modes of authentication.
fatal: Authentication failed for 'https://github.com/theeksha30-bot/demo-.git'
[root@ip-10-0-1-189 theekshaal]# git push -u origin main
Username for 'https://github.com': theeksha30-bot
Password for 'https://theeksha30-bot@github.com':
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (6/6), 461 bytes | 461.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), done.
To https://github.com/theeksha30-bot/demo-.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
[root@ip-10-0-1-189 theekshaal]#
```

Screenshot of the GitHub repository overview for the user 'theeksha30-bot'. The repository 'demo-' is selected.

Repository details:

- Name: demo-
- Description: it is practise
- Last updated: Updated 18 minutes ago

Profile information for theeksha30-bot:

- Edit profile button

Screenshot of the GitHub repository page for 'demo-'.

Repository navigation:

- Code (selected)
- Issues
- Pull requests
- Actions
- Projects
- Wiki
- Security
- Insights
- Settings

Repository stats:

- main branch
- 1 Branch
- 0 Tags
- Go to file search bar
- Add file button
- Code switcher

File list:

- root: file is created updated (c6abb11 · 33 minutes ago)
- sample.txt: file is created updated (33 minutes ago)

README section:

- Icon:
- Title: Add a README
- Text: Help people interested in this repository understand your project by adding a README.
- Button: Add a README

Right sidebar:

- About:
 - it is practise
 - Activity
 - 0 stars
 - 1 watching
 - 0 forks
- Releases:
 - No releases published
 - Create a new release
- Packages:
 - No packages published
 - Publish your first package

7.project :How to download and Run Project from github

Repositories: simple-reactjs-app

```
$ npm install
npm warn old lockfile
npm warn old lockfile The package-lock.json file was created with an old version of npm,
npm warn old lockfile so supplemental metadata must be fetched from the registry.
npm warn old lockfile
npm warn old lockfile This is a one-time fix-up, please be patient...
npm warn old lockfile
npm warn deprecated urix@0.1.0: Please see https://github.com/lydell/urix#deprecated
npm warn deprecated set-value@2.0.2: Critical bug fixed in v3.0.1, please upgrade to the latest version.
npm warn deprecated rimraf@2.6.2: Rimraf versions prior to v4 are no longer supported
npm warn deprecated sw-precache@0.2.1: Please migrate to Workbox: https://developers.google.com/web/tools/workbox/guides/migrations/migrate-from-sw
npm warn deprecated source-map@0.4.0: See https://github.com/lydell/source-map#deprecated
npm warn deprecated qs@1.6.0: some dependency vulnerabilities fixed, support for node < 10 dropped, and newer ECMAScript syntax/features added
npm warn deprecated qs@5.1: You or someone you depend on is using Q, the JavaScript Promise library that gave JavaScript developers strong feelings about promises. They can almost certainly migrate to the native JavaScript promise now. Thank you everyone for joining me in this bet against the odds. Be excellent to each other.
npm warn deprecated
npm warn deprecated qs@3.0.0: (For a CaaTP with native promises, see @endo/eventual-send and @endo/capture)
npm warn deprecated mixin-deps@1.3.1: Critical bug fixed in v2.0.1, please upgrade to the latest version.
npm warn deprecated uid@0.3.2: Please upgrade to version 7 or higher. Older versions may use Math.random() in certain circumstances, which is known to be problematic. See https://v8.dev/b
log/math-random for details.
npm warn deprecated is-data-descriptor@0.1.4: Please upgrade to v0.1.5
npm warn deprecated is-accessor-descriptor@0.1.6: Please upgrade to v0.1.7
npm warn deprecated ini@0.3.5: Please update to ini >=1.3.6 to avoid a prototype pollution issue
npm warn deprecated inflight@0.1.0:6: This module is not supported, and leaks memory. Do not use it. Check out lru-cache if you want a good and tested way to coalesce async requests by a key va
lue, which is much more comprehensive and powerful.
npm warn deprecated json3@3.2: Please use the native JSON object instead of JSON 3
npm warn deprecated querystring@0.2.0: The querystring API has been considered legacy, new code should use the URLSearchParams API instead.
npm warn deprecated canary@0.1.1: This is a canary release, please add a dependency to this version bump
npm warn deprecated source-map-resolve@0.5.2: See https://github.com/lydell/source-map-resolve#deprecated
npm warn deprecated har-validator@5.0.3: this library is no longer supported
npm warn deprecated sw-toolbox@3.6.0: Please migrate to Workbox: https://developers.google.com/web/tools/workbox/guides/migrations/migrate-from-sw
npm warn deprecated flatten@0.1.2: flatten is deprecated in favor of utility frameworks such as lodash.
npm warn deprecated glob@7.1.2: Glob versions prior to v9 are no longer supported
npm warn deprecated request@2.87.0: request has been deprecated, see https://github.com/request/request/issues/3142
npm warn deprecated html-webpack-plugin@2.29.0: out of support
npm warn deprecated dom-element-type@0.1.3:0: update to dom-element-type@1.3.1
npm warn deprecated content-type-parser@1.0.2: Use whatwg-mimetype instead
npm warn deprecated eslint-loader@1.9.0: This loader has been deprecated. Please use eslint-webpack-plugin
npm warn deprecated circular-json@0.3.3: CircularJSON is in maintenance only, flattened is its successor.
npm warn deprecated extract-text-webpack-plugin@3.0.2: Deprecated. Please use https://github.com/webpack-contrib/mini-css-extract-plugin
npm warn deprecated browserslist@2.11.3: Browserslist 2 could fail on reading Browserslist >3.0 config used in other tools.
npm warn deprecated mkdirp@0.5.1: Legacy versions of mkdirp are no longer supported. Please update to mkdirp 1.x. (Note that the API surface has changed to use Promises in 1.x.)
npm warn deprecated set-value@0.4.3: Critical bug fixed in v3.0.1, please upgrade to the latest version.
npm warn deprecated is-accessor-descriptor@0.1.0: Please upgrade to v1.0.1
npm warn deprecated is-data-descriptor@0.1.0: Please upgrade to v1.0.1
Compiled successfully!
```

```
npm warn deprecated har-validator@5.0.3: this library is no longer supported
npm warn deprecated sw-toolbox@3.6.0: Please migrate to Workbox: https://developers.google.com/web/tools/workbox/guides/migrations/migrate-from-sw
npm warn deprecated flatten@0.1.2: flatten is deprecated in favor of utility frameworks such as lodash.
npm warn deprecated glob@7.1.2: Glob versions prior to v9 are no longer supported
npm warn deprecated request@2.87.0: request has been deprecated, see https://github.com/request/request/issues/3142
npm warn deprecated html-webpack-plugin@2.29.0: out of support
npm warn deprecated dom-element-type@0.1.3:0: update to dom-element-type@1.3.1
npm warn deprecated content-type-parser@1.0.2: Use whatwg-mimetype instead
npm warn deprecated eslint-loader@1.9.0: This loader has been deprecated. Please use eslint-webpack-plugin
npm warn deprecated circular-json@0.3.3: CircularJSON is in maintenance only, flattened is its successor.
npm warn deprecated extract-text-webpack-plugin@3.0.2: Deprecated. Please use https://github.com/webpack-contrib/mini-css-extract-plugin
npm warn deprecated browserslist@2.11.3: Browserslist 2 could fail on reading Browserslist >3.0 config used in other tools.
npm warn deprecated mkdirp@0.5.1: Legacy versions of mkdirp are no longer supported. Please update to mkdirp 1.x. (Note that the API surface has changed to use Promises in 1.x.)
npm warn deprecated set-value@0.4.3: Critical bug fixed in v3.0.1, please upgrade to the latest version.
npm warn deprecated is-accessor-descriptor@0.1.0: Please upgrade to v1.0.1
npm warn deprecated is-data-descriptor@0.1.0: Please upgrade to v1.0.1
You can now view simple-reactjs-app in the browser.
  Local:          http://localhost:3000/
  On Your Network: http://192.168.91.1:3000/
Note that the development build is not optimized.
To create a production build, use npm run build.
```

Final Result:

The screenshot shows a web browser window titled "React App" displaying a simple React application. The title bar also includes tabs for "ReleaseNotes.html", "Personal Access Tokens (C)", and "localhost:3000/customerlist". The main content area features a dark header with a central atom icon and the text "Simple React App". Below this, there is a list of three customer entries, each enclosed in a light blue box:

- John Smith**
jsmith@test.com
123456789
[Click to View Details](#)
- ABCD**
abcd@test.com
987654321
[Click to View Details](#)
- Tyrion**
tyrion@test.com
123412345

On the left side of the list, there are small icons for heart, info, and more options. To the right of the list, there is a detailed view for John Smith, which includes:

- Name : John Smith
- Email : jsmith@test.com
- Phone : 123456789
- City : bangalore
- State : karnataka
- Country : India
- Organization : Company 1
- Job Profile : Software Developer

Additional Info : Has Bought a lot of products before and a high Value Customer

Project 8: How To Automatically Trigger in Jenkins using pipeline script interacting with the GitHub

Creating the JOB-4-THEEKSHA:

The screenshot shows the Jenkins job configuration page for 'theekshajob4'. The top navigation bar includes 'Dashboard', 'theekshajob4', 'Configuration', 'Search (CTRL+K)', and user information. The main configuration area has a 'General' tab selected, showing the following details:

- Description:** cloning the github with jenkins with poll SCM build triggers
- Enabled:** Yes (blue toggle switch)
- Discard old builds:** Enabled (checked)
- Strategy:** Log Rotation
- Days to keep builds:** 1 (input field)

At the bottom are 'Save' and 'Apply' buttons.

Below this, the 'Source Code Management' section is visible, showing 'Git' selected and a 'Repositories' dropdown.

Jenkins

Dashboard > job1 >

Status job1

This is first jenkins job.

Changes Workspace Build Now Configure Delete Project Rename

Builds

Filter Today #1 6:58 AM

Permalinks

- Last build (#1), 2 hr 54 min ago
- Last stable build (#1), 2 hr 54 min ago
- Last successful build (#1), 2 hr 54 min ago
- Last completed build (#1), 2 hr 54 min ago

REST API Jenkins 2.479.2

The screenshot shows the Jenkins interface for a job named 'job1'. It includes a sidebar with options like Changes, Workspace, and Build Now. Below is a 'Builds' section with a table showing one build (#1) from today at 6:58 AM. A 'Permalinks' section lists four recent builds. At the bottom, there's a REST API link and version information.

Dashboard [Jenkins] Not secure 65.2.166.244:8080

Jenkins

Search (CTRL+K) theeksha k log out

New Item Build History Add description

Manage Jenkins My Views

Build Queue No builds in the queue.

Build Executor Status 0/2 Icon: S M L

Last Success Last Failure Last Duration

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀️	job1	10 hr #1	N/A	0.19 sec
✓	☀️	theekshaajob1	6 hr 59 min #2	N/A	2.8 sec

REST API Jenkins 2.479.2

The screenshot shows the Jenkins dashboard. It features a sidebar with New Item, Build History, Manage Jenkins, and My Views. Below is a 'Build Queue' section indicating no builds in the queue. A 'Build Executor Status' section shows 0/2 executors available. A table lists build statistics for two jobs: 'job1' and 'theekshaajob1'. At the bottom, there's a REST API link and version information.



Project 9: How to Clone with GitHub using Jenkins

Creating JOB-1-THEEKSHA:

The screenshot shows the Jenkins job configuration page for 'theekshaajob1'. The left sidebar contains links for Status, Changes, Build Now, Configure, Delete Pipeline, Stages, Rename, Pipeline Syntax, and Polling Log. The main content area is titled 'theekshaajob1' and contains the text 'THIS IS THE JOB USING PIPELINE SCRIPT'. Below this is a 'Permalinks' section. The 'Builds' section shows two builds: #2 (10:03 AM) and #1 (10:02 AM), both marked with a green checkmark.

The screenshot shows the Jenkins console output for build #2 of 'theekshaajob1'. The left sidebar includes links for Status, Changes, Console Output (which is selected), Edit Build Information, Delete build #2, Timings, Pipeline Overview, Pipeline Console, Restart from Stage, Replay, Pipeline Steps, Workspaces, and Previous Build. The main content area is titled 'Console Output' and displays the following log output:

```
Started by user theeksha k
[Pipeline] Start of Pipeline
[Pipeline] node
[Pipeline] Running on Jenkins in /var/lib/jenkins/workspace/theekshaajob1
[Pipeline] {
[Pipeline] stage
[Pipeline] {
[Pipeline] {
[Pipeline] sh
+ echo "ip-adress"
"ip-adress"
+ hostname -I
10.0.1.31
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] {
[Pipeline] sh
+ echo MEMORY DETAILS
MEMORY DETAILS
+ free -m
total        used        free      shared  buff/cache   available
Mem:       957         776        115          0        216        180
```

← → ⌛ Not secure 15.206.70.219:8080/job/theekshaajob1/2/console

Dashboard > theekshaajob1 > #2

```
total      used      free      shared      buff/cache   available
Mem:       957       776       115          0        216       180
Swap:        0         0         0
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Build-CPU details)
[Pipeline] sh
+ echo CPU DETAILS
CPU DETAILS
+ lscpu
Architecture:           x86_64
CPU op-mode(s):         32-bit, 64-bit
Address sizes:          48 bits physical, 48 bits virtual
Byte Order:              Little Endian
CPU(s):                 1
On-line CPU(s) list:    0
Vendor ID:              GenuineIntel
Model name:             Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz
CPU family:              6
Model:                  63
Thread(s) per core:     1
Core(s) per socket:     1
Socket(s):              1
Stepping:               2
BogoMIPS:                4800.03
Flags:                  fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ht
                        syscall nx rdtscp lm constant_tsc rep_good nopl xtTopology cpuid tsc_known_freq pn1 pclmulqdq ssse3 fma cx16 pcid sse4_1 sse4_2 x2apic
                        movbe popcnt tsc deadline timer aes xsave avx f16c rdrand hypervisor lahf_lm abm cpuid fault pti fsrbsbase bm1 avx2 smp bmi2 erms invpcid
```

← → ⌛ Not secure 15.206.70.219:8080/job/theekshaajob1/2/console

Dashboard > theekshaajob1 > #2

```
Stepping:                      2
BogoMIPS:                     4800.03
Flags:                         fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ht
                                syscall nx rdtscp lm constant_tsc rep_good nopl xtTopology cpuid tsc_known_freq pn1 pclmulqdq ssse3 fma cx16 pcid sse4_1 sse4_2 x2apic
                                movbe popcnt tsc deadline timer aes xsave avx f16c rdrand hypervisor lahf_lm abm cpuid fault pti fsrbsbase bm1 avx2 smp bmi2 erms invpcid
                                xsaveopt
Hypervisor vendor:            Xen
Virtualization type:          full
L1d cache:                    32 KiB (1 instance)
L1i cache:                    32 KiB (1 instance)
L2 cache:                     256 KiB (1 instance)
L3 cache:                     30 MiB (1 instance)
NUMA node(s):                 1
NUMA node0 CPU(s):            0
Vulnerability Gather data sampling: Not affected
Vulnerability I1lb multihit:   KVM: Mitigation: VMX unsupported
Vulnerability L1tf:            Mitigation; PTE Inversion
Vulnerability Mds:            Vulnerable: Clear CPU buffers attempted, no microcode; SMT Host state unknown
Vulnerability Meltdown:       Mitigation; PTI
Vulnerability Mmio stale data: Vulnerable: Clear CPU buffers attempted, no microcode; SMT Host state unknown
Vulnerability Reg file data sampling: Not affected
Vulnerability Retbleed:       Not affected
Vulnerability Spec rstack overflow: Not affected
Vulnerability Spec store bypass: Vulnerable
Vulnerability Spectre v1:      Mitigation; usercopy/swaps barriers and __user pointer sanitization
Vulnerability Spectre v2:      Mitigation; Retpolines; STIBP disabled; RSB filling; PBRSB-eIBRS Not affected; BHI Retpoline
Vulnerability Srbds:          Not affected
Vulnerability Tsx async abort: Not affected
[Pipeline] }
```

← → ⌂ Not secure 15.206.70.219:8080/job/theekshaajob1/2/console

Dashboard > theekshaajob1 > #2

```
Vulnerability Tsx async abort:      Not affected
[Pipeline]
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Todays date)
[Pipeline] sh
+ echo TODAYS DATE
TODAYS DATE
+ date
Fri Dec 13 10:03:14 UTC 2024
[Pipeline]
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (process command)
[Pipeline] sh
+ echo Process command
Process command
+ ps -ef
+ tail -3
jenkins  2787  2784  0 10:03 ?    00:00:00 sleep 3
jenkins  2788  2785  0 10:03 ?    00:00:00 ps -ef
jenkins  2789  2785  0 10:03 ?    00:00:00 tail -3
[Pipeline]
[Pipeline] // stage
[Pipeline]
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

theekshaajob1 [Jenkins] x + ← → ⌂ Not secure 65.2.166.244:8080/job/theekshaajob1/

 Jenkins

Search (CTRL+K) ? ! theeksha k log out

Dashboard > theekshaajob1 >

>Status theekshaajob1 Edit description

</> Changes

THIS IS THE JOB USING PIPELINE SCRIPT

Build Now

Configure

Delete Pipeline

Full Stage View

Stages

Average stage times: (Average full run time: ~5s)

Build-System details	Build-Memory details	Build-CPU details	Todays date	process command
472ms	464ms	367ms	423ms	378ms
374ms	366ms	352ms	363ms	390ms
571ms	562ms	383ms	483ms	366ms

Stage View

Builds

Filter Type here to search

Permalinks

10:40 PM 13-Dec-24

