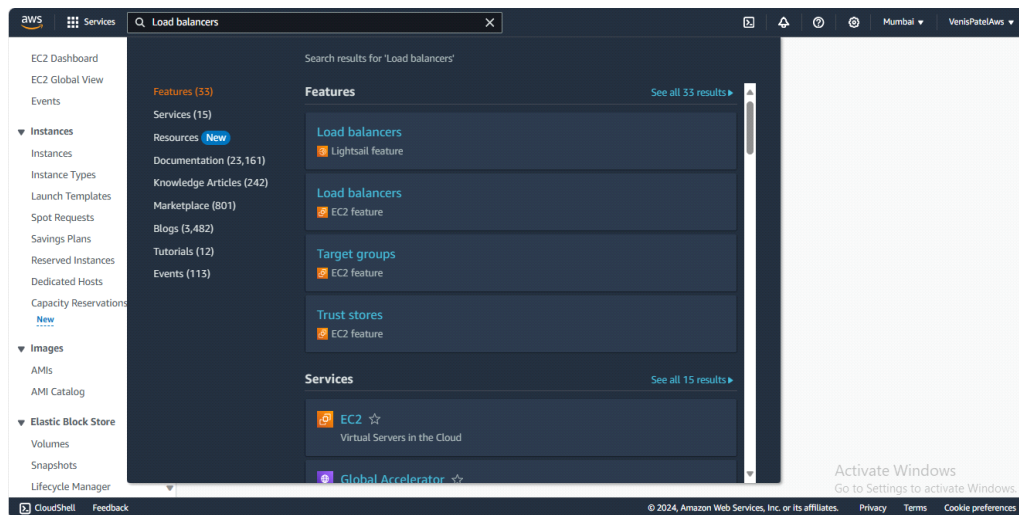
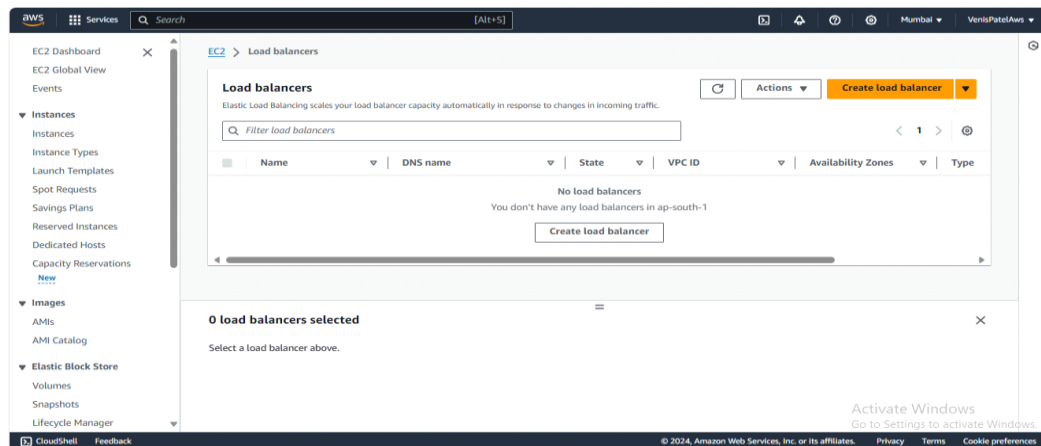


TASK 4: Create an ALB and map the instances under ALB.

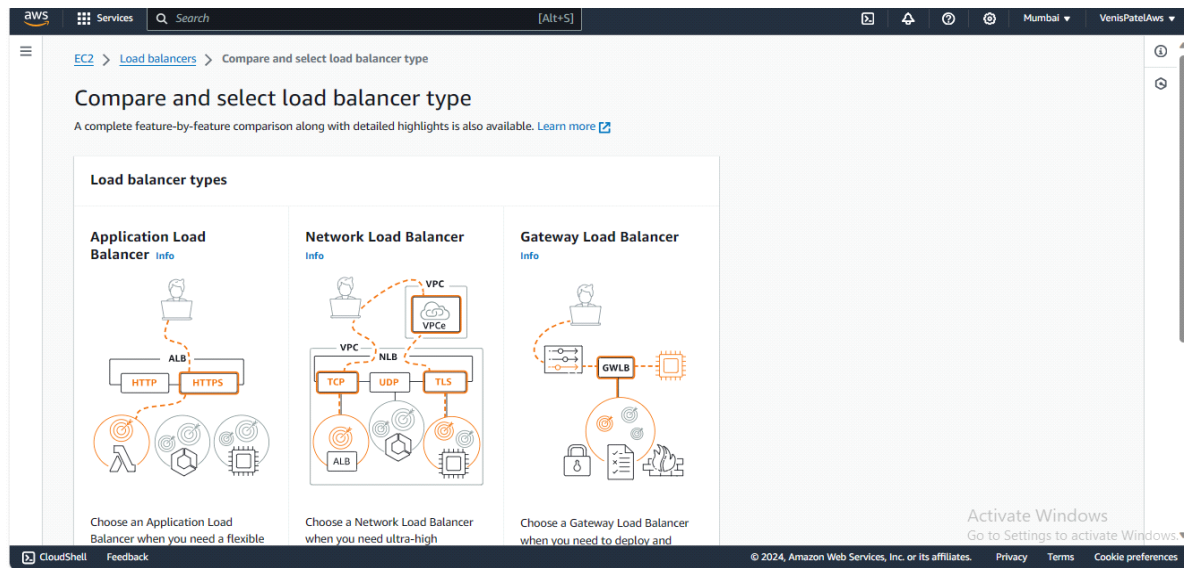
1. Go to AWS console and search for "Load balancers" and select option with EC2 feature .



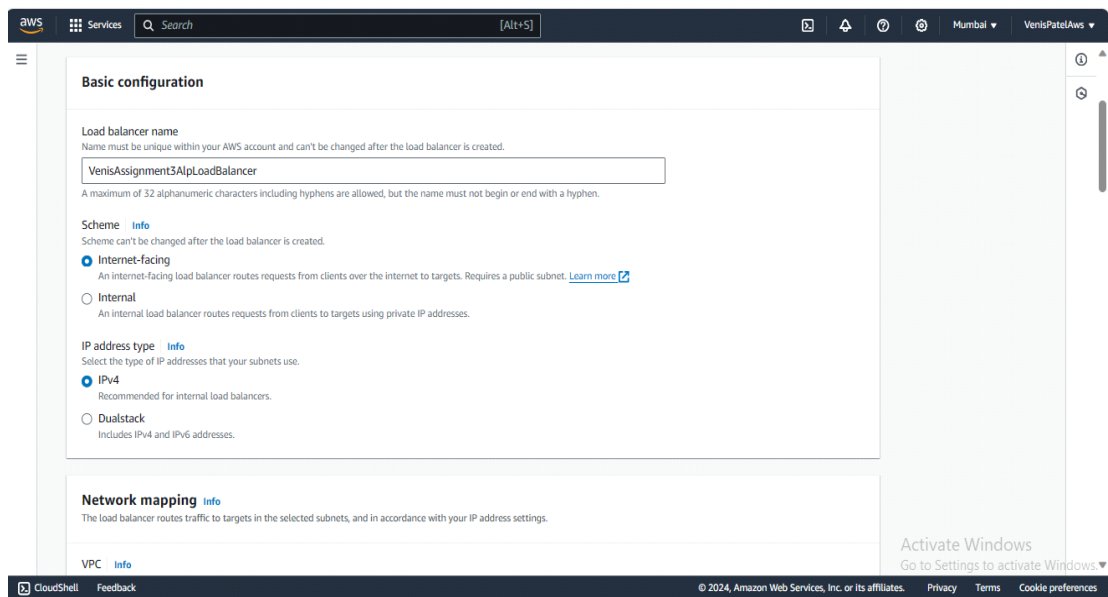
2. Now Click on “Create load balancer”.



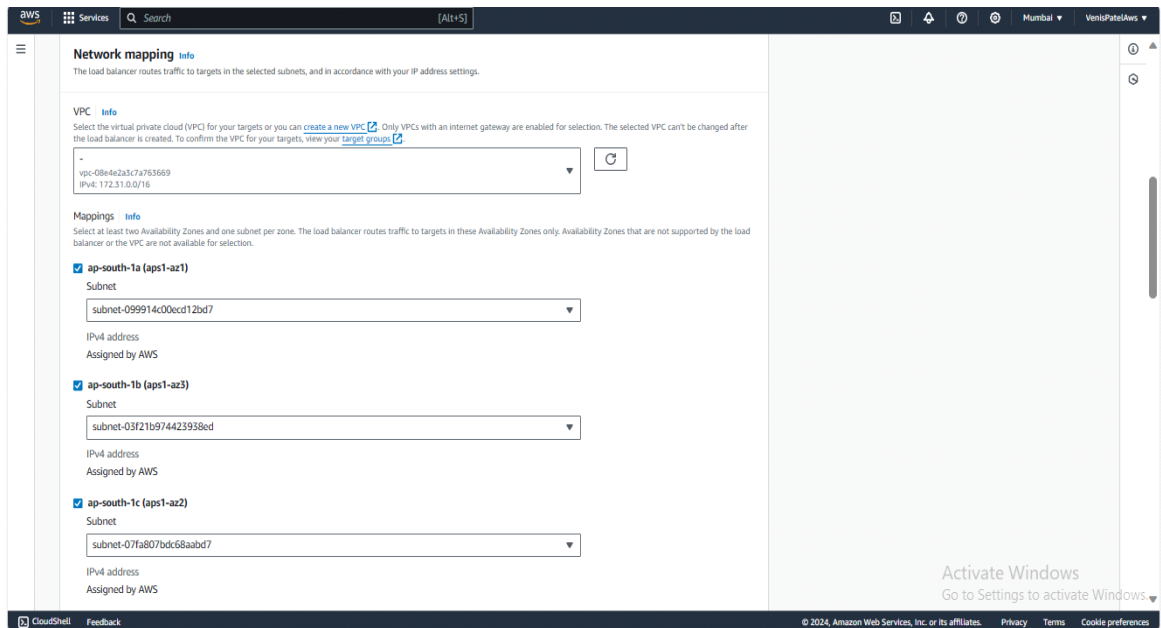
3. After that select Application Load Balancer in Load balancer types selection.



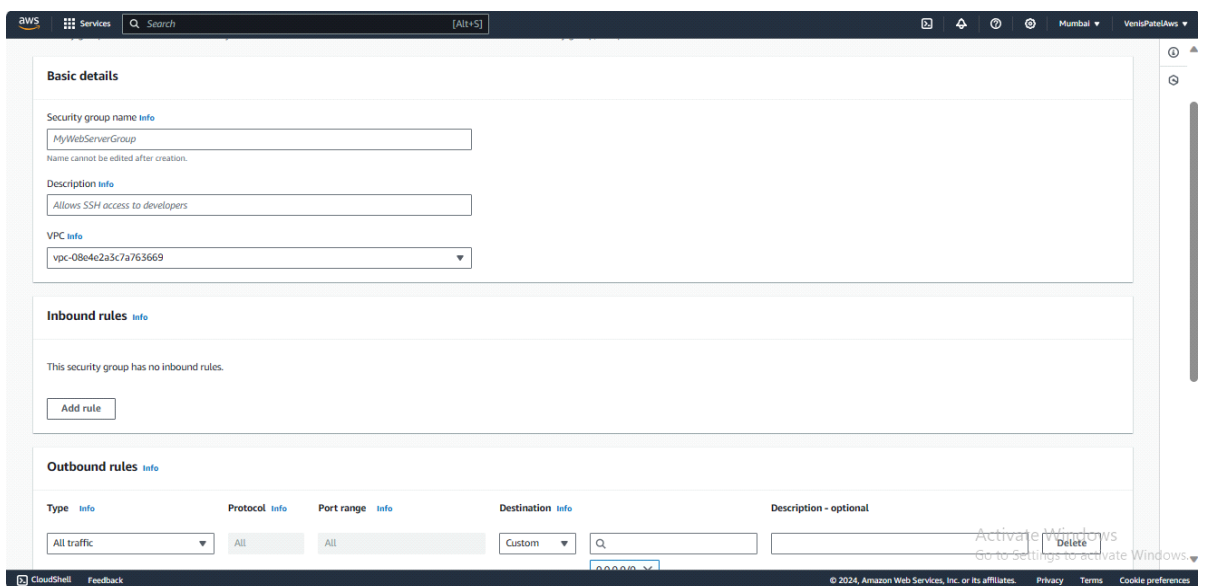
4. Now , we need to enter name, keep other things same .



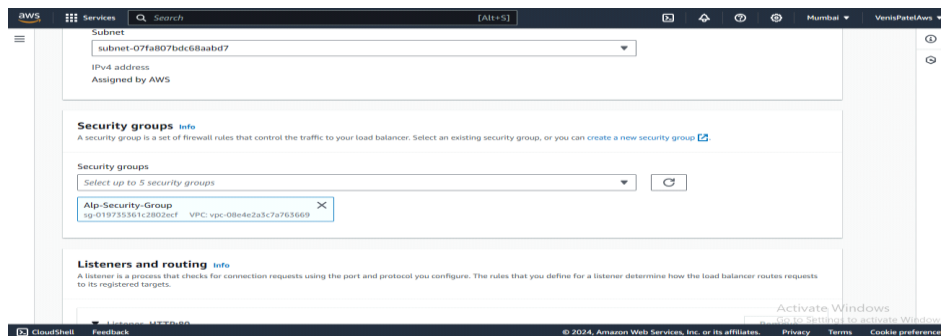
5. In Network Mapping keep VPC same, and select all Mapping zones .



6. In security groups, click on link “create a new security group”, Now enter the name and description , then click add rule inside Inbound tab, then select Type HTTP and select source as any (0.0.0.0/0), keep outbound rules as it is (All Traffic), Finally click on “create security group”.



7. Now select only alp-security-group from the security group.



8. Then inside Listeners and Routing tab click on link “create target group”, In this choose type Instances, then enter target group name , Keep Protocol HTTP and port 80, And then click on next.

Basic configuration

Settings in this section can't be changed after the target group is created.

Choose a target type

☒ Instances

- Supports load balancing to instances within a specific VPC.
- Facilitates the use of [Amazon EC2 Auto Scaling](#) to manage and scale your EC2 capacity.

☐ IP addresses

- Supports load balancing to VPC and on-premises resources.
- Facilitates routing to multiple IP addresses and network interfaces on the same instance.
- Offers flexibility with microservice based architectures, simplifying inter-application communication.
- Supports IPv6 targets, enabling end-to-end IPv6 communication, and IPv4-to-IPv6 NAT.

☐ Lambda function

- Facilitates routing to a single Lambda function.
- Accessible to Application Load Balancers only.

☐ Application Load Balancer

- Offers the flexibility for a Network Load Balancer to accept and route TCP requests within a specific VPC.
- Facilitates using static IP addresses and PrivateLink with an Application Load Balancer.

Target group name

Alp-LoadBalancer-Target-Group

A maximum of 32 alphanumeric characters including hyphens are allowed, but the name must not begin or end with a hyphen.

Protocol : Port

Choose a protocol for your target group that corresponds to the Load Balancer type that will route traffic to it. Some protocols now include anomaly detection for the targets and you can set mitigation options once your target group is created. This choice cannot be changed

Target group name

Alp-LoadBalancer-Target-Group

A maximum of 32 alphanumeric characters including hyphens are allowed, but the name must not begin or end with a hyphen.

Protocol : Port

Choose a protocol for your target group that corresponds to the Load Balancer type that will route traffic to it. Some protocols now include anomaly detection for the targets and you can set mitigation options once your target group is created. This choice cannot be changed after creation

HTTP

80

1-65535

IP address type

Only targets with the indicated IP address type can be registered to this target group.

☒ IPv4

Each instance has a default network interface (eth0) that is assigned the primary private IPv4 address. The instance's primary private IPv4 address is the one that will be applied to the target.

☐ IPv6

Each instance you register must have an assigned primary IPv6 address. This is configured on the instance's default network interface (eth0). [Learn more](#)

VPC

Select the VPC with the instances that you want to include in the target group. Only VPCs that support the IP address type selected above are available in this list.

vpc-08e4e2a3c7a763669
IPv4: 172.31.0.0/16

Protocol version

☒ HTTP1

Send requests to targets using HTTP/1.1. Supported when the request protocol is HTTP/1.1 or HTTP/2.

☐ HTTP2

Send requests to targets using HTTP/2. Supported when the request protocol is HTTP/2 or gRPC, but gRPC-specific features are not available.

☐ gRPC

9. Now select instance then click on pending below and then click on create target group.

Filter instances

Instance ID	Name	State	Security groups	Zone	Private IP address
i-04b1587a5d9e612f9	MyFirstInstance	Running	launch-wizard-1	ap-south-1a	172.31.38.234

0 selected

Ports for the selected instances

Ports for routing traffic to the selected instances.

80

1-65535 (separate multiple ports with commas)

Include as pending below

1 selection is now pending below. Include more or register targets when ready.

Review targets

Targets (1)

Filter targets

Show only pending

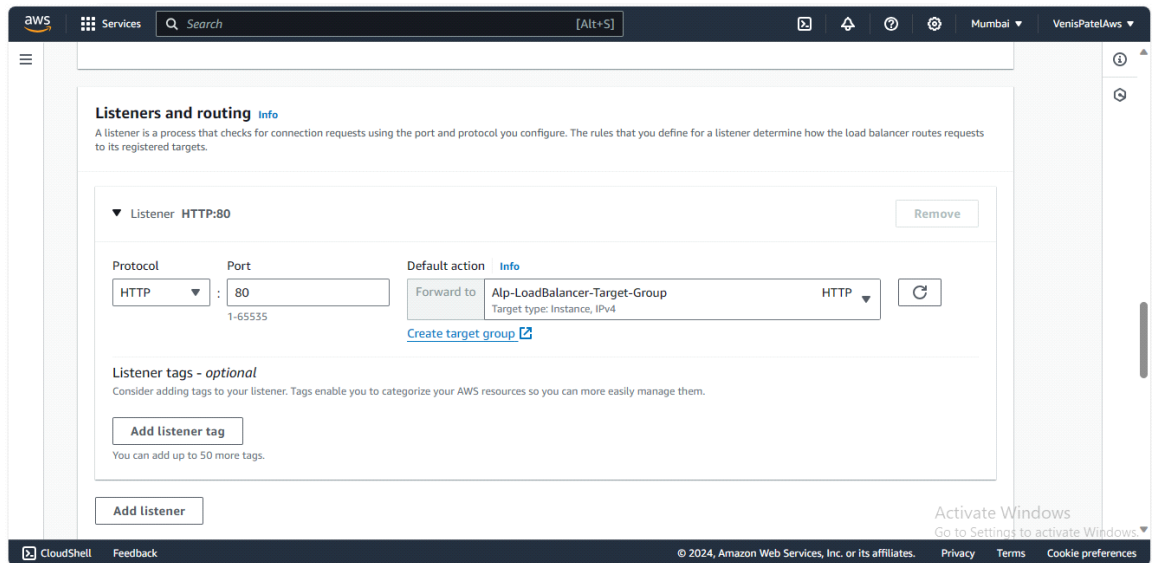
Instance ID	Name	Port	State	Security groups	Zone	Private IP address	Subnet ID	Launch
i-04b1587a5d9e612f9	MyFirstInstance	80	Running	launch-wizard-1	ap-south-1a	172.31.38.234	subnet-099914c00ecd12bd7	January

1 pending

Cancel Previous **Create target group** Windows

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10 . Now select “Alp-Loadbalancer-Target-Group” inside Listeners and routing.



11. Finally click on “Create Load Balancer” and Now we can see that our load balancer has been created .

