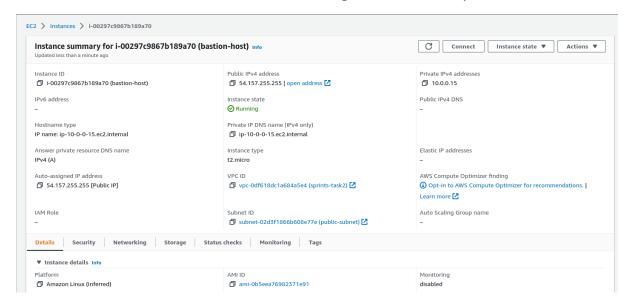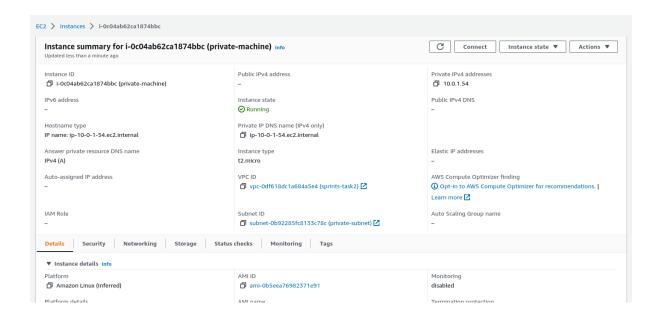# LAB 03 - AWS

Task 01:

- Launch a jump host
- Take a screen while you are ssh to the jump host
- Also, When you ssh from bastion to the private machine
- Screenshot from the console showing the instances Ips

```
Home          Sprints Course

Activities    Terminal                                    Dec 26  12:32

                                        ec2-user@ip-10-0-1-54:~

File  Edit  View  Search  Terminal  Help
[mohamed@localhost Downloads]$ ssh -i task01-sprints.pem ec2-user@54.157.255.255
Last login: Mon Dec 26 10:28:58 2022 from 102.44.170.221

      __|  __|_  )
      _|  (     /    Amazon Linux 2 AMI
     ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-10-0-0-15 ~]$ vim keypair
[ec2-user@ip-10-0-0-15 ~]$ chmod 400 keypair
[ec2-user@ip-10-0-0-15 ~]$ ssh -i keypair ec2-user@10.0.1.54
The authenticity of host '10.0.1.54 (10.0.1.54)' can't be established.
ECDSA key fingerprint is SHA256:9bTIcCXyxx/dr4N2LLZfIrqNl9HnVFrKQFSIX77U2io.
ECDSA key fingerprint is MD5:bc:8d:5b:00:b2:43:17:76:1f:2d:b0:90:61:47:8f:a5.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '10.0.1.54' (ECDSA) to the list of known hosts.

      __|  __|_  )
      _|  (     /    Amazon Linux 2 AMI
     ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-10-0-1-54 ~]$
```
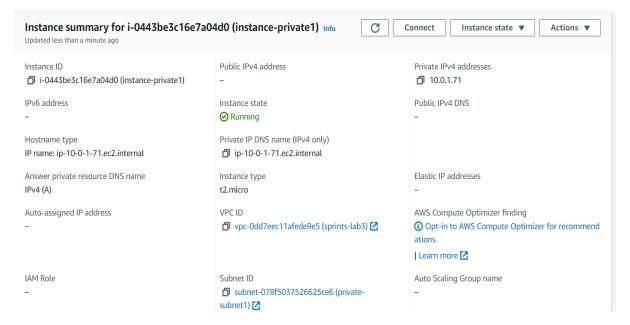
Task 02:

Implement the below diagram then take a screenshot while you put dns of the load balancer into the browser and it returns a response from the 2 apache instances.

Also Screenshot from the console showing the machines BE WS have private Ips.

And finally, a screenshot showing the targets of the 2 load balancers target groups are healthy.

Instance summary for i-0443be3c16e7a04d0 (instance-private1) Info

Updated less than a minute ago

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0443be3c16e7a04d0 (instance-private1)	–	10.0.1.71
IPv6 address	Instance state	Public IPv4 DNS
–	⊘ Running	–
Hostname type	Private IP DNS name (IPv4 only)	
IP name: ip-10-0-1-71.ec2.internal	ip-10-0-1-71.ec2.internal	
Answer private resource DNS name	Instance type	Elastic IP addresses
IPv4 (A)	t2.micro	–
Auto-assigned IP address	VPC ID	AWS Compute Optimizer finding
–	vpc-0dd7eec11afede9e5 (sprints-lab3)	ⓘ Opt-in to AWS Compute Optimizer for recommendations. | Learn more
IAM Role	Subnet ID	Auto Scaling Group name
–	subnet-078f5037526625ce6 (private-subnet1)	–

Instance summary for i-04060604de0ae8b49 (instance-private2) Info
Updated less than a minute ago

[⟳] [Connect] [Instance state ▼] [Actions ▼]

Instance ID	Public IPv4 address	Private IPv4 addresses
🗇 i-04060604de0ae8b49 (instance-private2)	–	🗇 10.0.3.101

IPv6 address	Instance state	Public IPv4 DNS
–	⊘ Running	–

Hostname type	Private IP DNS name (IPv4 only)	
IP name: ip-10-0-3-101.ec2.internal	🗇 ip-10-0-3-101.ec2.internal	

Answer private resource DNS name	Instance type	Elastic IP addresses
IPv4 (A)	t2.micro	–

Auto-assigned IP address	VPC ID	AWS Compute Optimizer finding
–	🗇 vpc-0dd7eec11afede9e5 (sprints-lab3) ↗	ⓘ Opt-in to AWS Compute Optimizer for recommendations. | Learn more ↗

IAM Role	Subnet ID	Auto Scaling Group name
–	🗇 subnet-00109e71e211cc2ac (private-subnet2) ↗	–

---

public
[Actions ▼]

Details
🗇 arn:aws:elasticloadbalancing:us-east-1:309705700864:targetgroup/public/5dbbdb57d22713da

Target type	Protocol : Port	Protocol version	VPC
Instance	HTTP: 80	HTTP1	vpc-0dd7eec11afede9e5 ↗

IP address type	Load balancer		
IPv4	ALB ↗		

Total targets	Healthy	Unhealthy	Unused	Initial	Draining
2	⊘ 2	⊗ 0	⊖ 0	⊕ 0	⊖ 0

Targets | Monitoring | Health checks | Attributes | Tags

Registered targets (2)
[🔍 Filter resources by property or value]   [⟳] [Deregister] [Register targets]

‹ 1 › ⚙

☐	Instance ID ▽	Name ▽	Port ▽	Zone ▽	Health status ▽	Health status details
☐	i-024ebe0f1cfea3ca6	instance-public1	80	us-east-1a	⊘ healthy	
☐	i-06e6871cd1fb7a0b9	instance-public2	80	us-east-1b	⊘ healthy	

---

private
[Actions ▼]

Details
🗇 arn:aws:elasticloadbalancing:us-east-1:309705700864:targetgroup/private/d49588809981f8d5

Target type	Protocol : Port	VPC	IP address type
Instance	TCP: 80	vpc-0dd7eec11afede9e5 ↗	IPv4

Load balancer			
NLB ↗			

Total targets	Healthy	Unhealthy	Unused	Initial	Draining
2	⊘ 2	⊗ 0	⊖ 0	⊕ 0	⊖ 0

Targets | Monitoring | Health checks | Attributes | Tags

Registered targets (2)
[🔍 Filter resources by property or value]   [⟳] [Deregister] [Register targets]

‹ 1 › ⚙

☐	Instance ID ▽	Name ▽	Port ▽	Zone ▽	Health status ▽	Health status details
☐	i-04060604de0ae8b49	instance-private2	80	us-east-1b	⊘ healthy	
☐	i-0443be3c16e7a04d0	instance-private1	80	us-east-1a	⊘ healthy	

← → C ▲ Not secure | alb-47256941.us-east-1.elb.amazonaws.com

△ ميكانيكا باور 2016-2...   ⬇ MP3Juices - Free M...   W List of largest Europ...   B. Boutique Hostel Fo...

'Hello World from ip-10-0-3-101.ec2.internal"

← → C ▲ Not secure | alb-47256941.us-east-1.elb.amazonaws.com

△ ميكانيكا باور 2016-2...   ⬇ MP3Juices - Free M...   W List of largest Europ...   B. Boutique Hostel Fo...   B. Booking.co

'Hello World from ip-10-0-1-71.ec2.internal"

Load balancers (2)

Elastic Load Balancing scales your load balancer capacity automatically in response to changes in incoming traffic.

🔄   Actions ▼   **Create load balancer**

	Name ▽	DNS name ▽	State ▽	VPC ID ▽	Availability Zones ▽	Type ▽	Created At ▽
☐	NLB	NLB-8a19830531ecbe32.elb.us-east-1.amazonaws.com	⊘ Active	vpc-0dd7eec11afede9e5	2 Availability Zones	network	December 27, 2022, 01:08 (UTC+02:00)
☐	ALB	ALB-47256941.us-east-1.elb.amazonaws.com	⊘ Active	vpc-0dd7eec11afede9e5	2 Availability Zones	application	December 27, 2022, 01:03 (UTC+02:00)