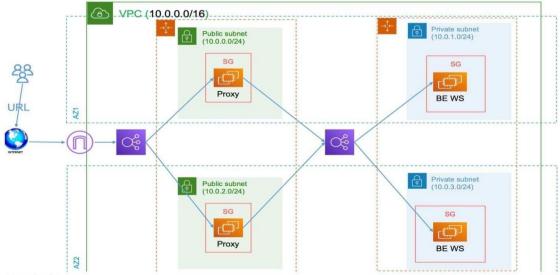
Question1:

Implement a vpc with cidr 10.0.0.0/16 with 2 public subnets with cidrs 10.0.0.0/24 and 10.0.0.2.0/24 with a load balancer to Distribute the traffic between 2 machines with nginx installed in them as a proxy and 2 private subnets with the below cidrs 10.0.1.0/24 and 10.0.0.3.0/24 then a 2 instances attached in autoscaling in the private subnets with apache installed without SSH and load balancer to install between them



Needed:

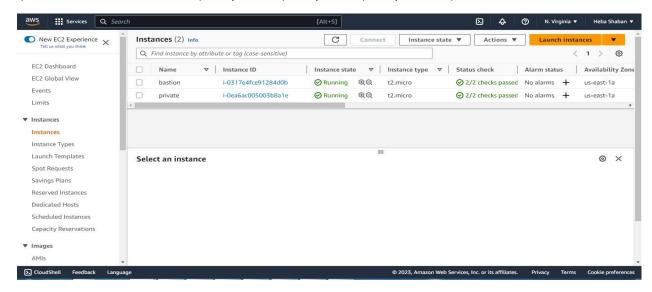
A screenshot from the autoscaling group after indicating the minimum ,maximum and desired instances

Screenshot from the 2 target groups indicating the machines are healthy

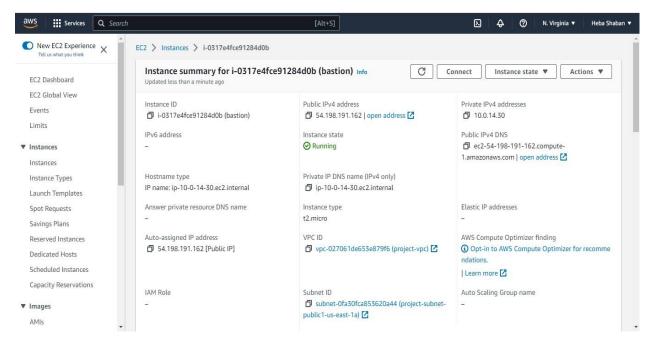
Screenshot indicate the the machines BE WS are private

Screenshot from the public load balancer when you hit a request from it from a browser with a response returned from the instances

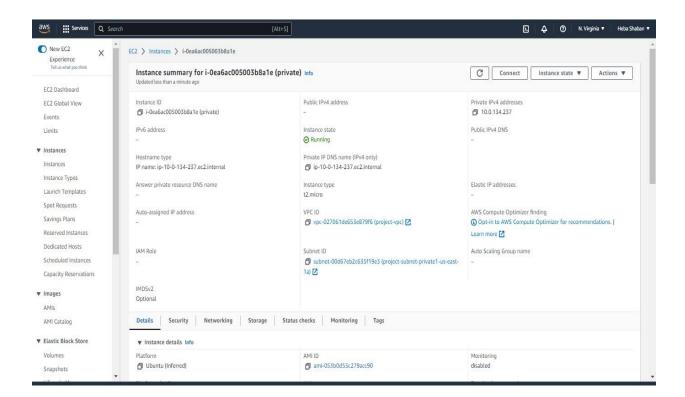
1) Create two instance bastion (with public IP) and private (with private IP)



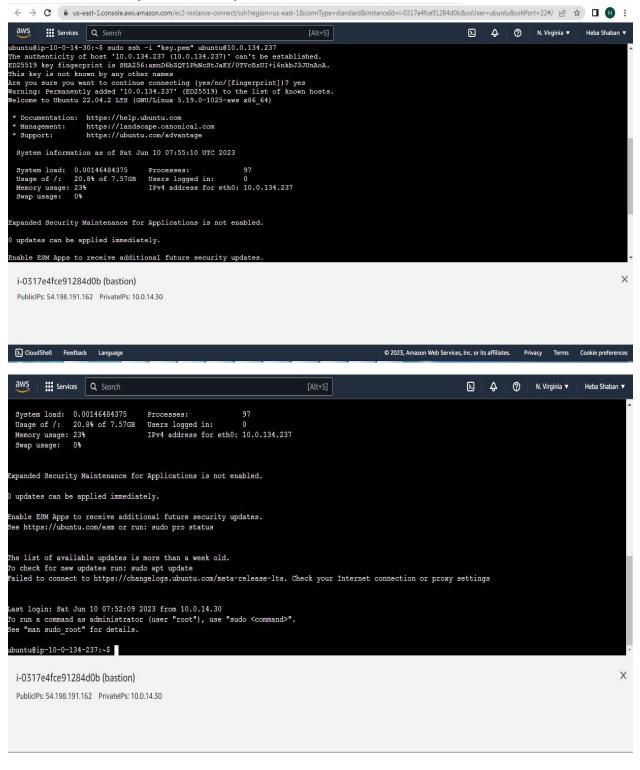
- bastion public



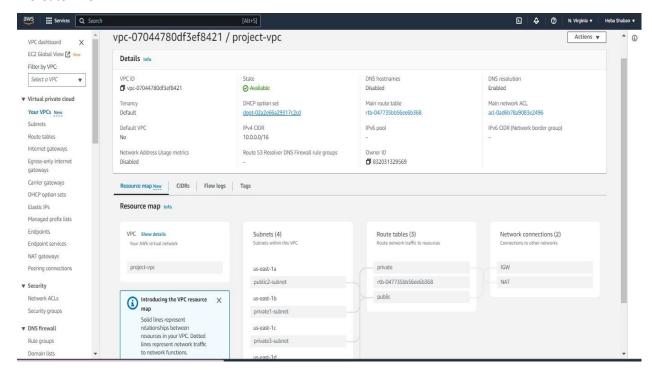
- private



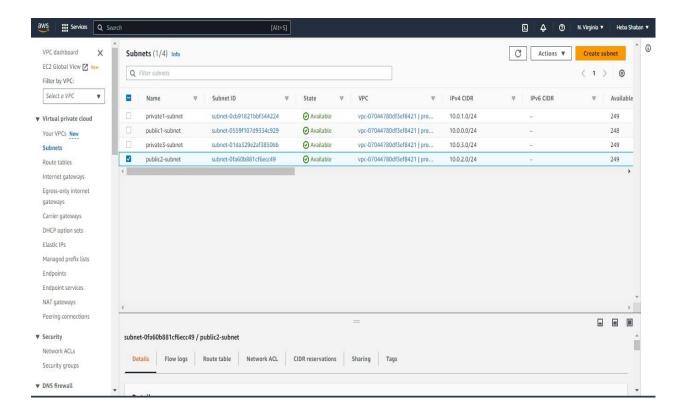
- Connect with ssh key from Public to private machine



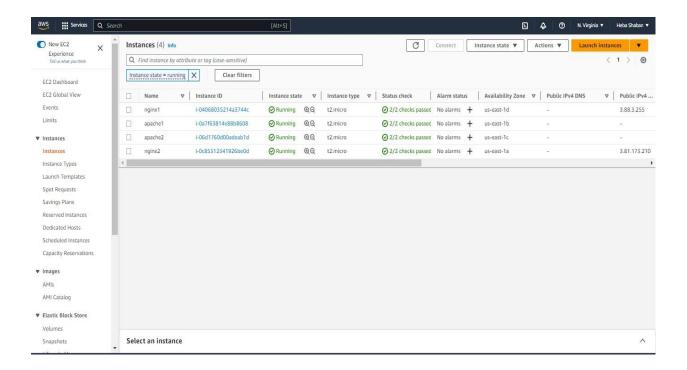
1- Create VPC



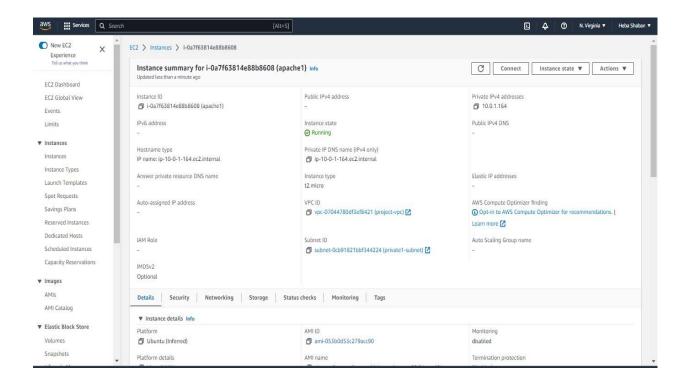
2- Create 4 subnet (two Public and two Private)



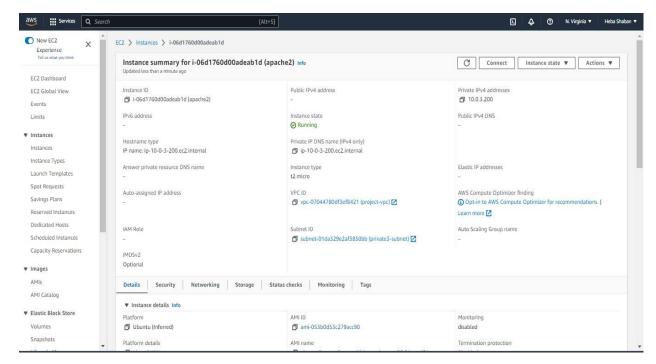
3- Create 4 instance



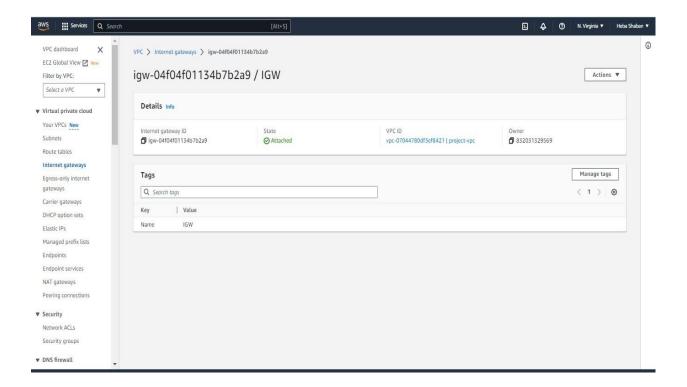
apache1 (private instance)



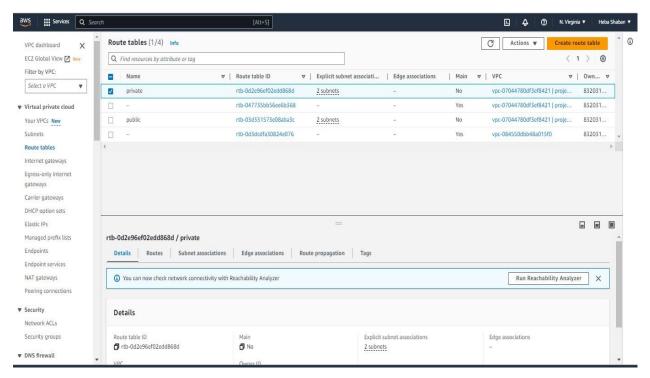
apache2 (private instance)



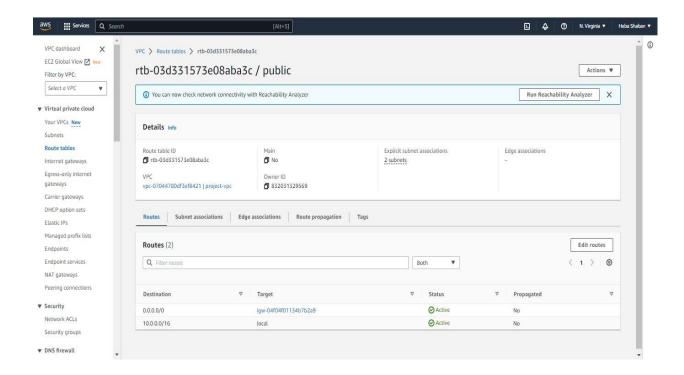
4- Internet Gateway



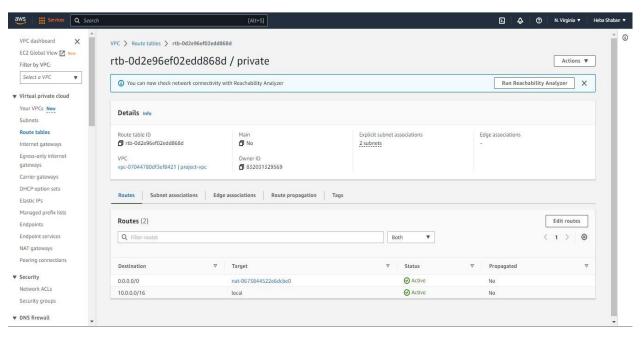
5- Create 2 Route table one public and one private



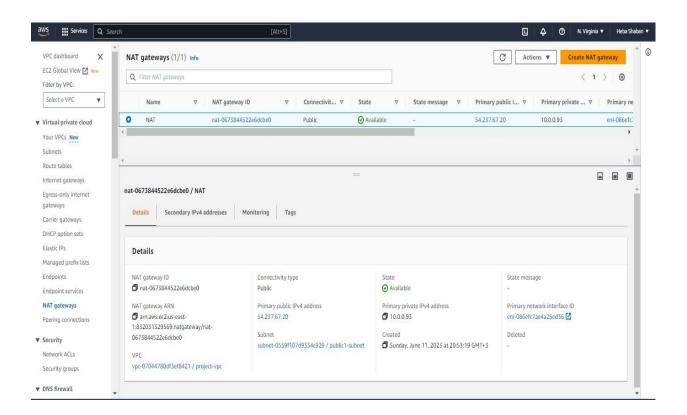
- Route table public



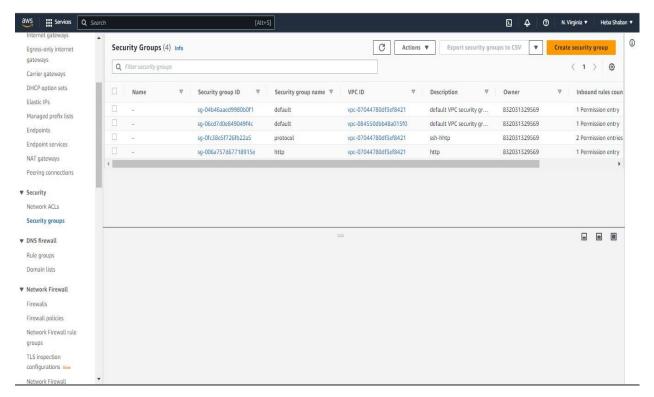
- Route table private



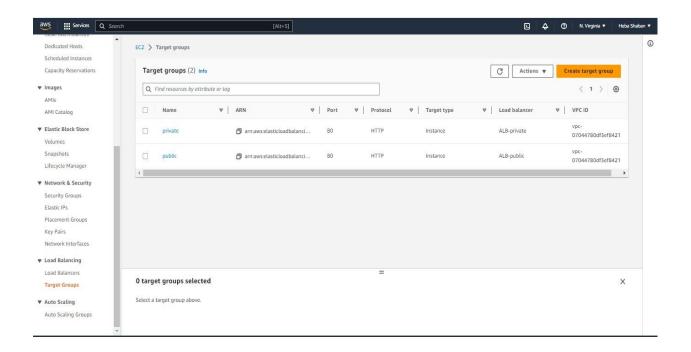
6- Create NAT Gateway



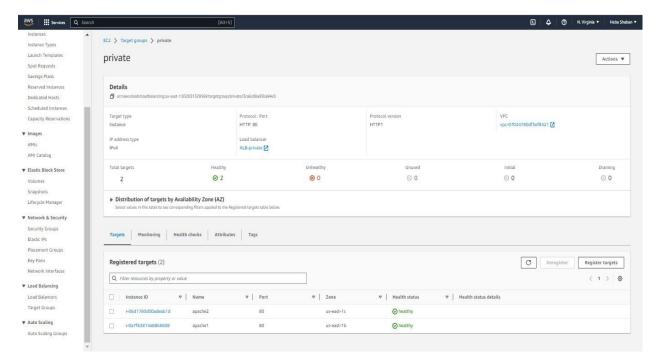
7- Create 2 security groups



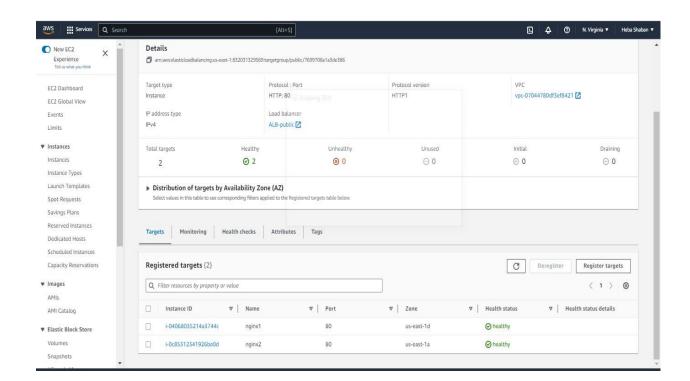
8- Create 2 Target group one private and one public



- private target for private machine

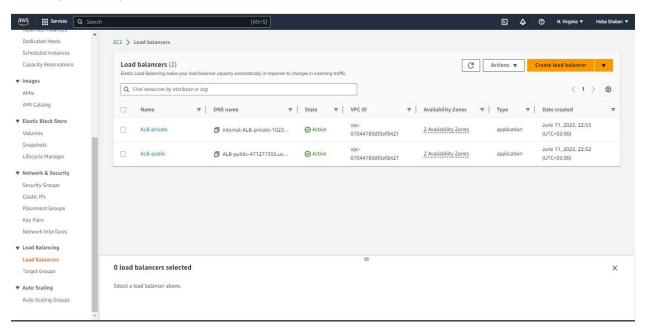


- public target for private machine



2) Create 2 Load blancer

- ALB-private for private machine
- ALB-public for public machine

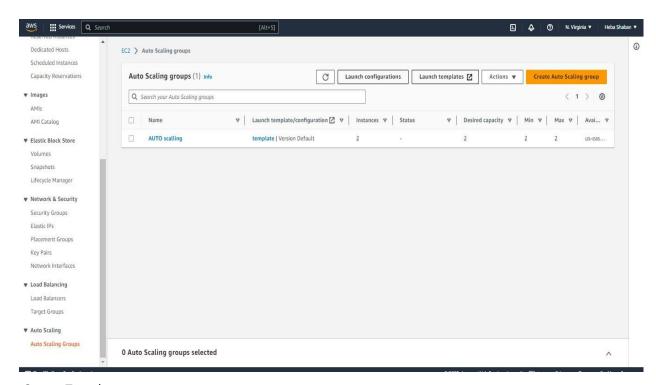


- The Output of Loadblancing

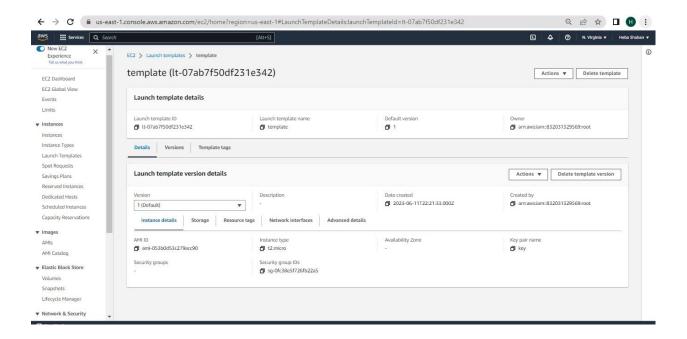


3)Auto scalling

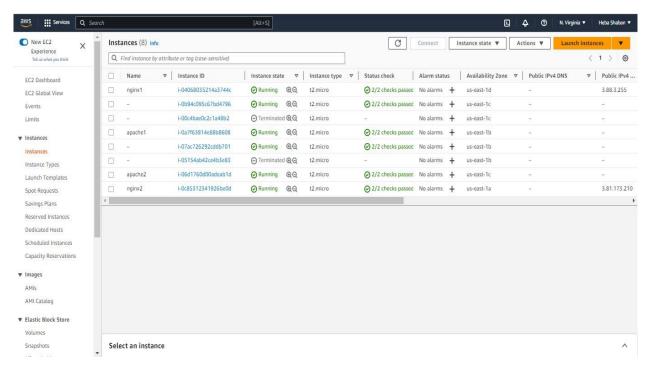
- Create Auto Scalling group for Private Load Blancer(private machine)



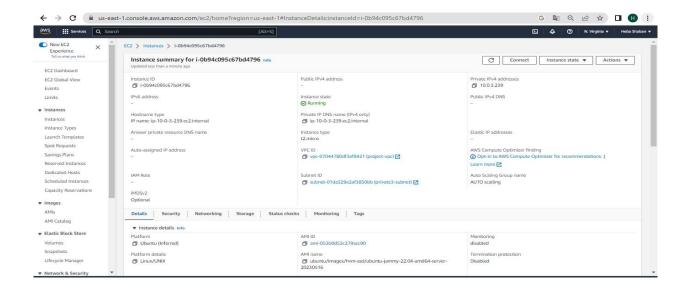
- Create Template

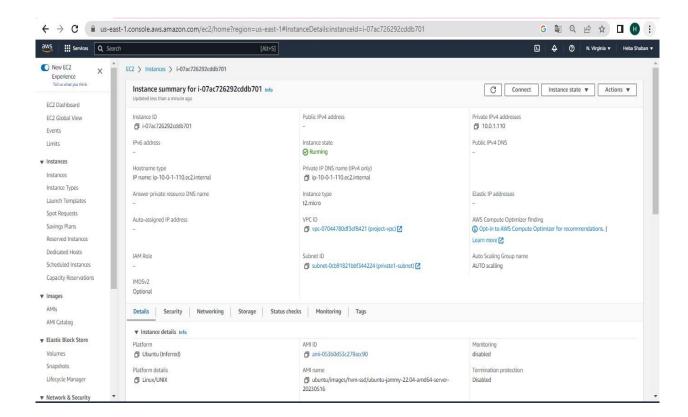


- Create Instance

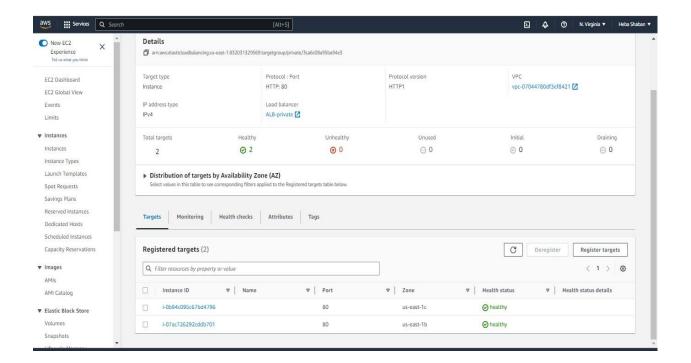


- Private instance

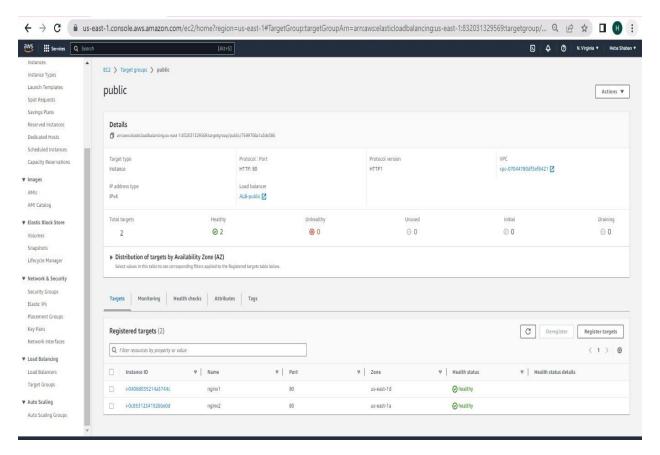




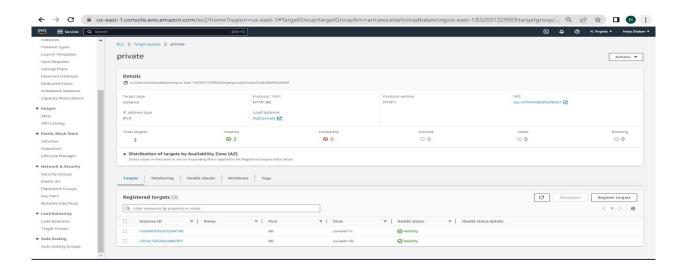
- Attach Instance to template



Create 2 target grouppublic target group



- private target group



- Output of loadblancing

