Two Tier Architecture Route53

Creating a Two-Tier architecture on AWS. We'll explore the essential services involved, ensuring high availability, security, and scalability for hosting a static website.
Also, we are adopting a modular approach with enhanced security measures. The infrastructure is organized into dedicated modules, ensuring a scalable, maintainable, and secure deployment
Create an isolated network with the following components: VPC

Subnets

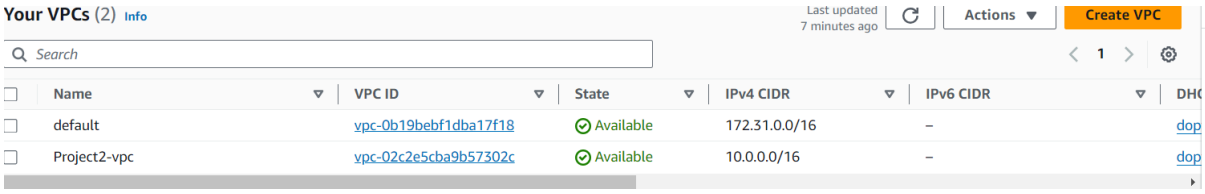
Route Tables

Internet Gateway

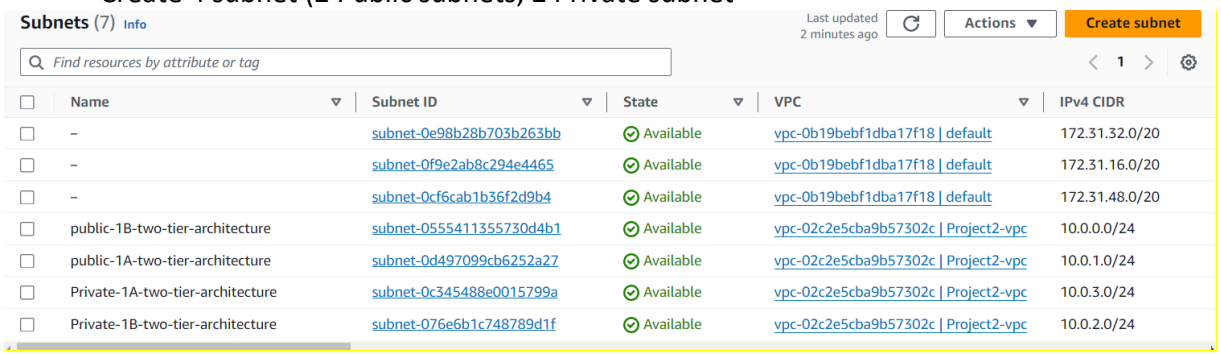
NAT gateway

Security Groups

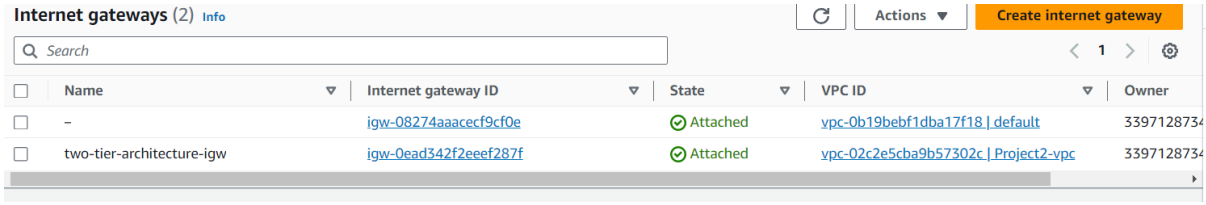
- Create VPC with CIDR Block range (10.0.0.0/16)



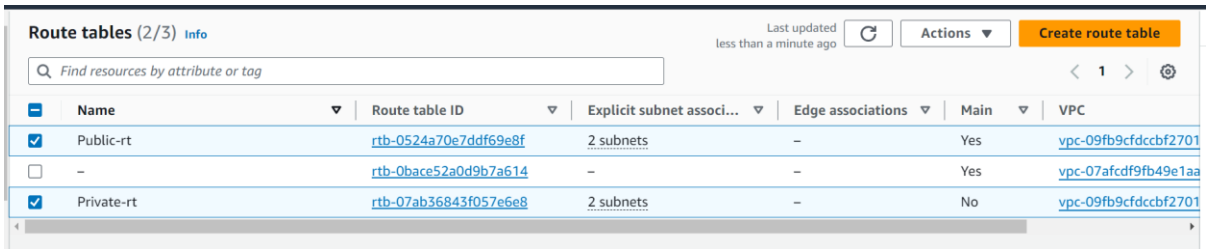
- Create 4 subnet (2 Public subnets, 2 Private subnet



- Create Internet gateway and attach to VPC



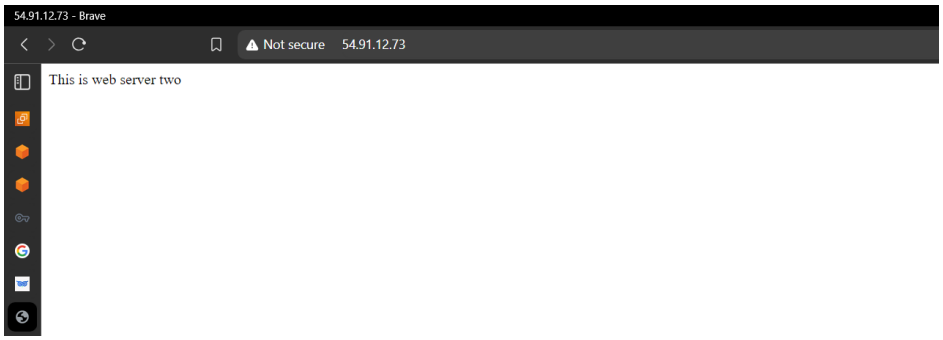
- Create Two route tables one for Public and Private subnets and add internet gateway to Public route table.



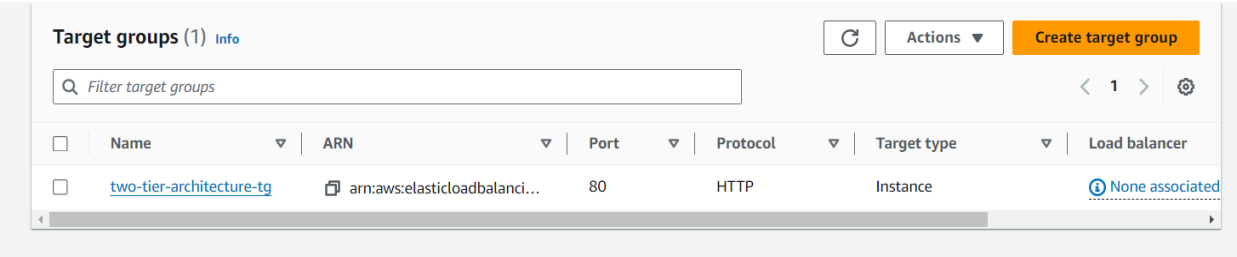
- Launch 2 Ec2 Web server and configure with Nginx.
- Create an sample Web Page in index.html

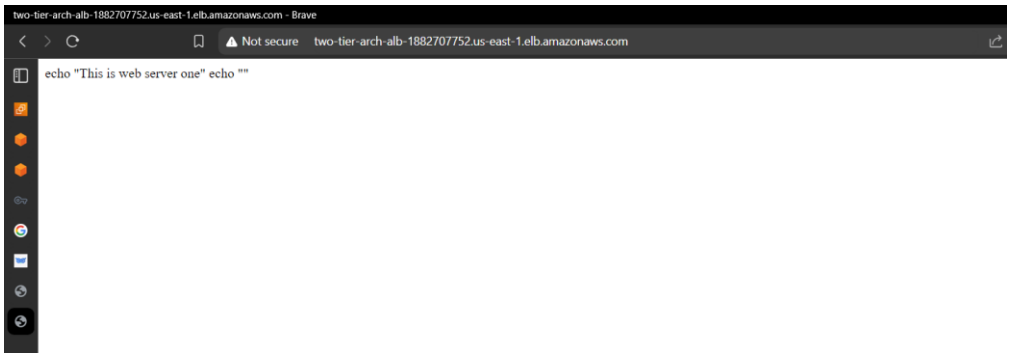
Webserver-1 :

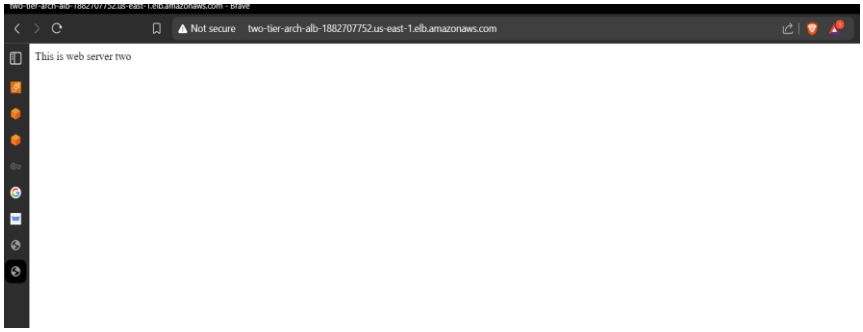
Webserver-2 :



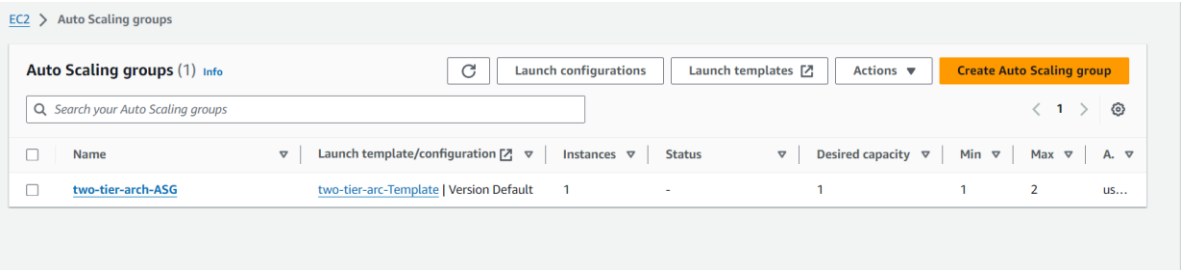
Create Application Load Balancer and add 2 ec2 instances in Target Group


Target groups (1) Info
Actions
Create target group
Filter target groups
1
Name
ARN
Port
Protocol
Target type
Load balancer
two-tier-architecture-tg
arn:aws:elasticloadbalanci...
80
HTTP
Instance
None associated

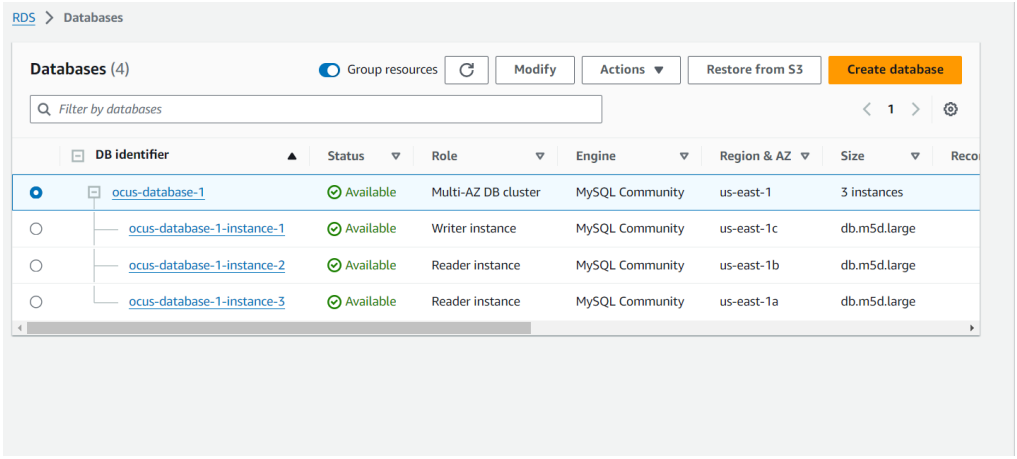
- Test Load Balancer with Load balancer DNS Name
- 



- **For Creation of Autoscaling we required Launch template.**

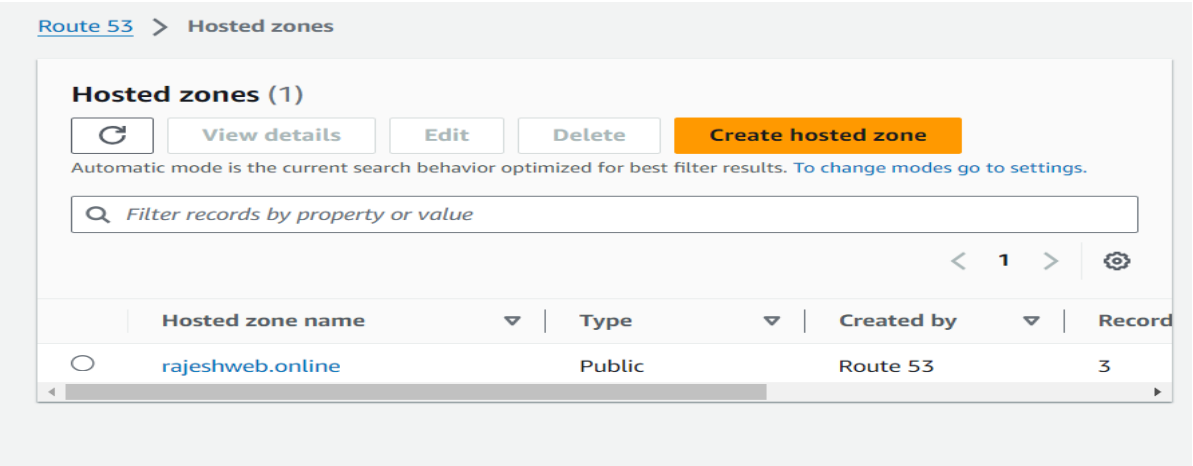


- **Create RDS and attach 2 Ec2 instances to the RDS for database access**

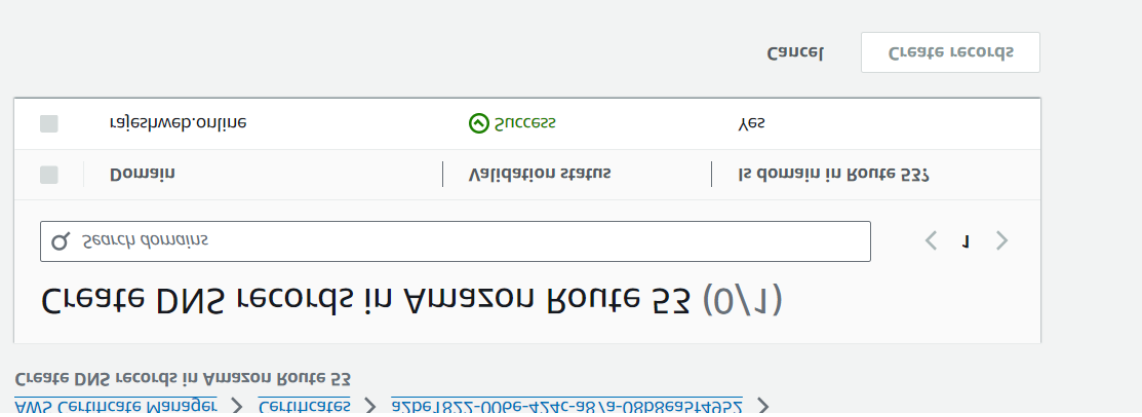


- **Tested writer instance in Public server**
-

- Create Hostedzone in Route 53

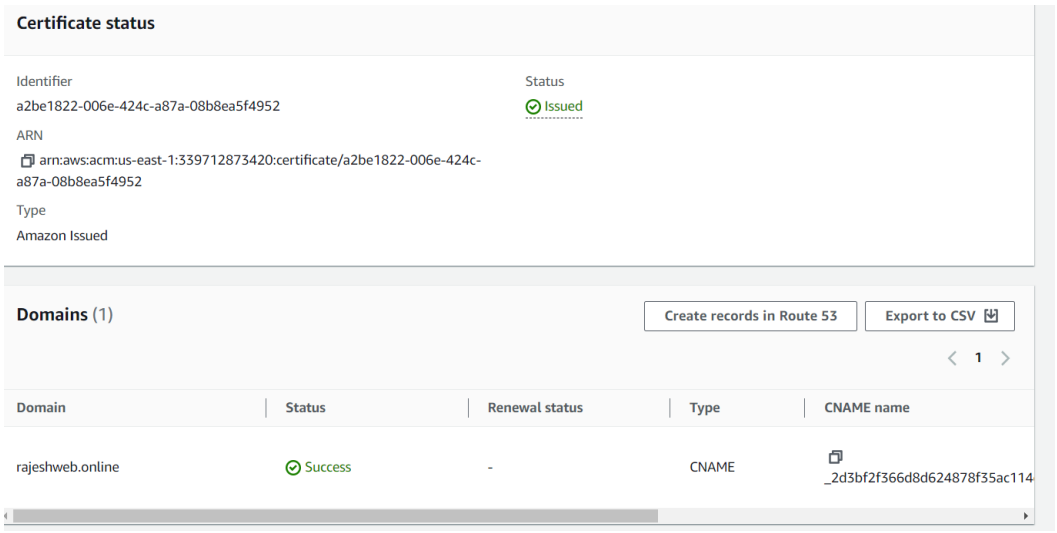


- **Configure Nameservers in Domain purchased website**

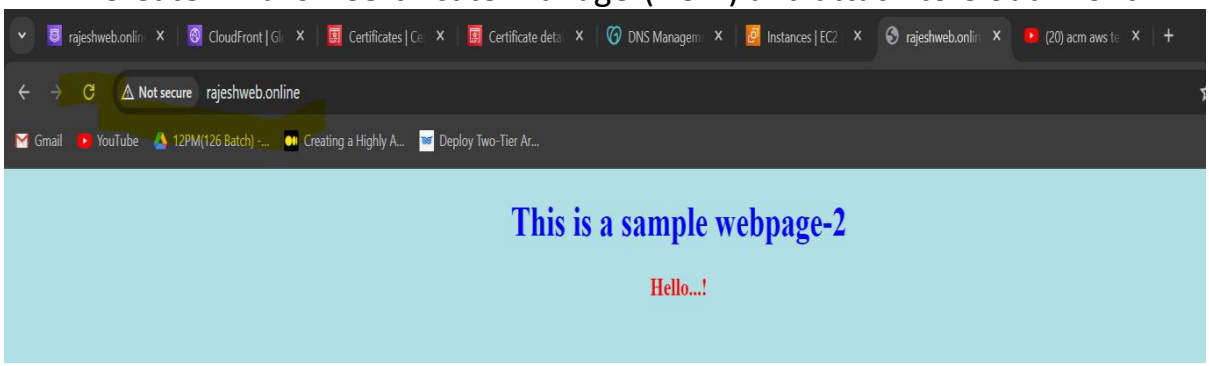


- I have purched domain in Godaddy.
- So editing my own Nameservers in Godaddy website.

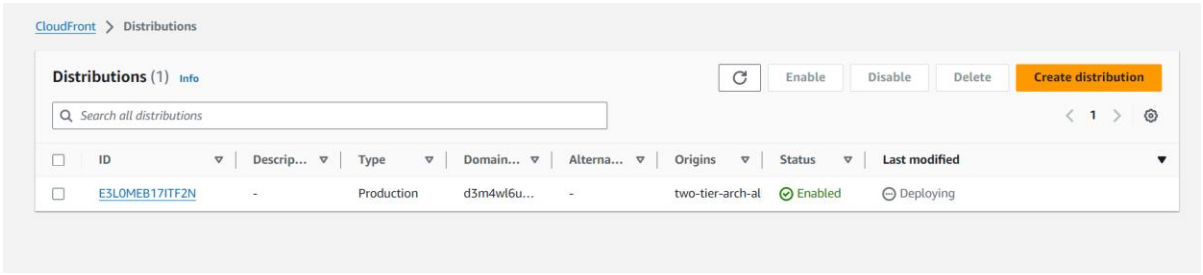
- In order to secure a webpage we required SSL/TLS Certificates in ACM

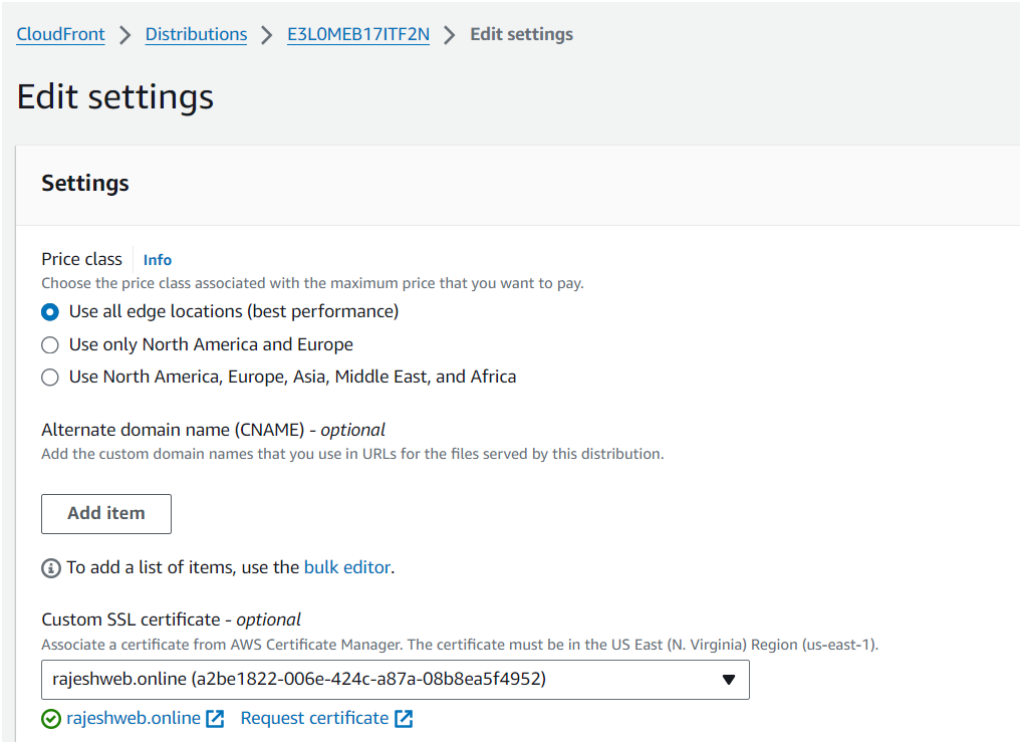


- Create Amazon Certificate Manager(ACM) and attach to Cloud Front

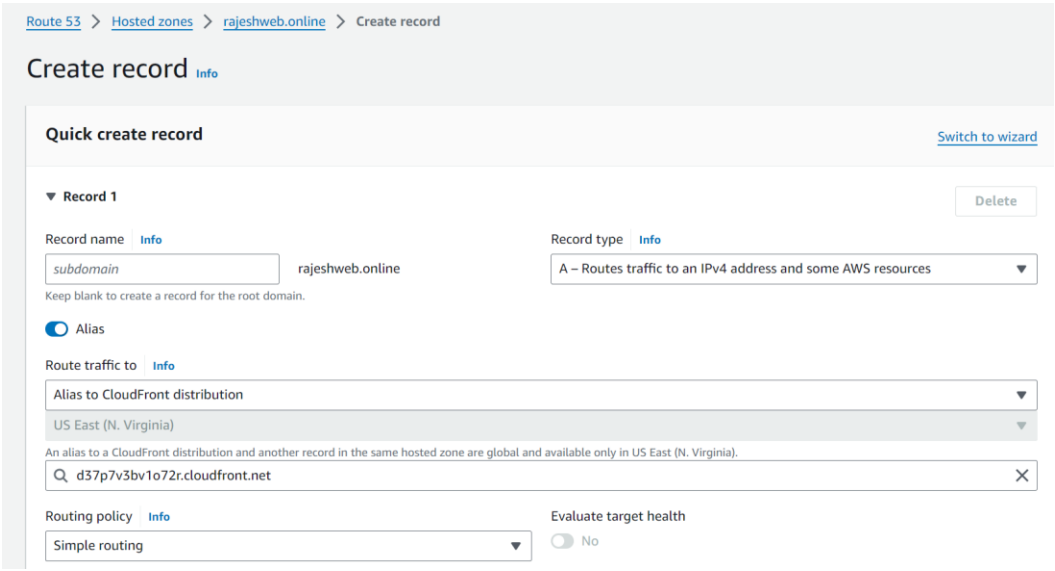


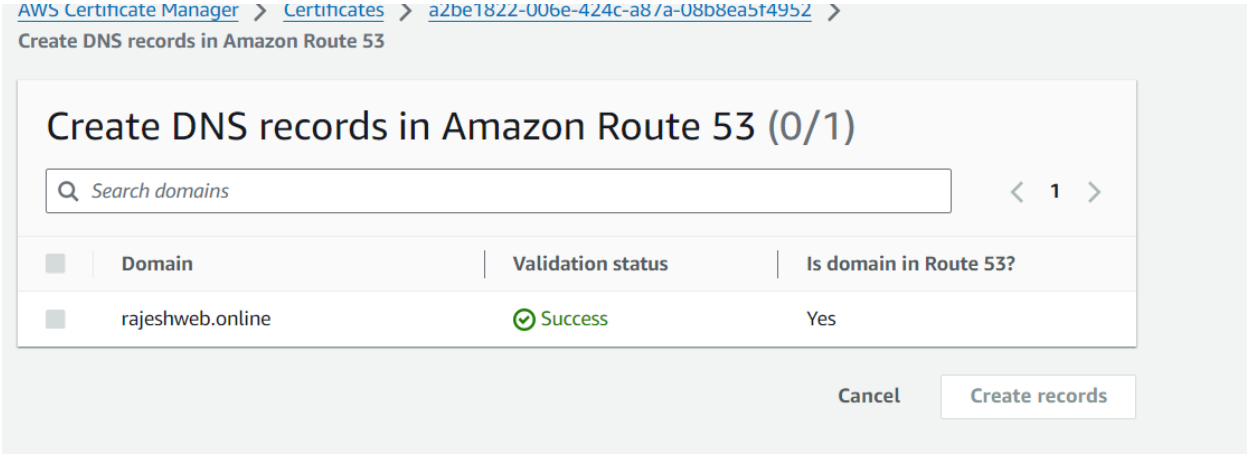
- **Creating Cloud Front and configuring**



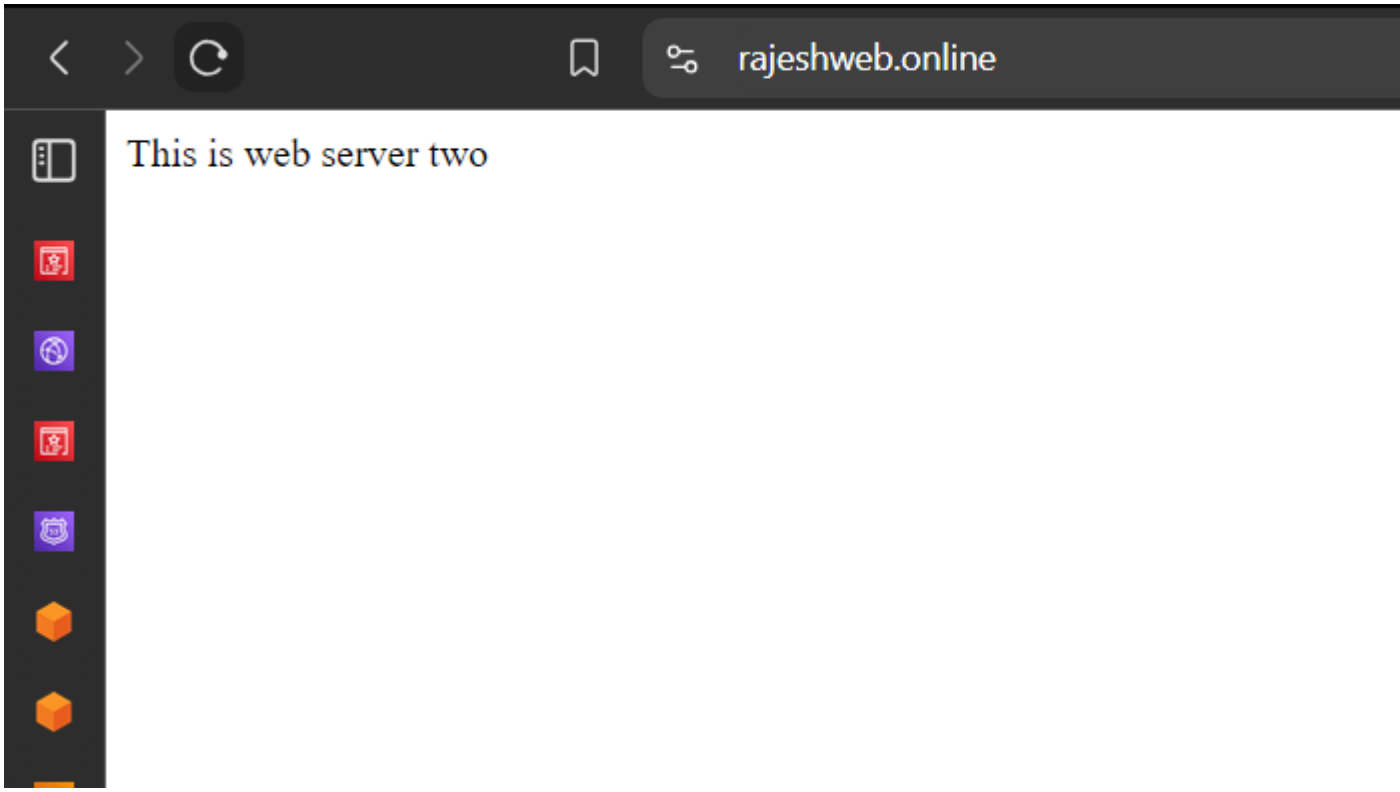


- Create a record in Route 53 add Cloud front in record.





- Test the out with our own DNS Name.



My Domain name is rajeshweb.online