



Module 4: ELB Assignment

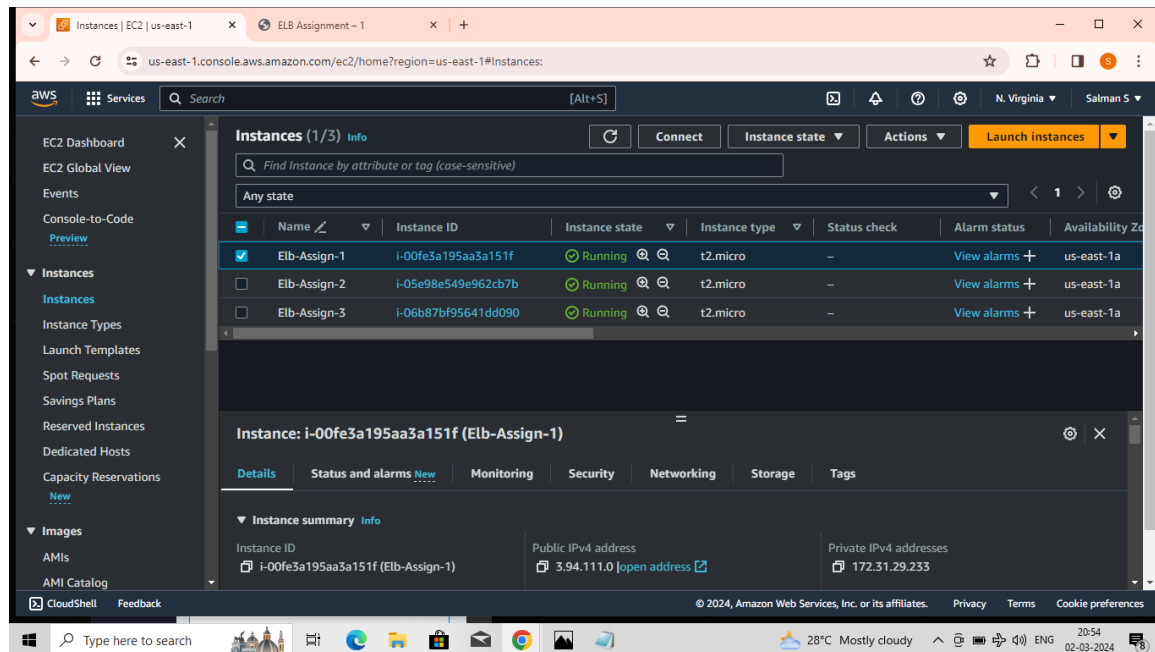
Problem Statement:

You work for XYZ Corporation that uses on premise solutions and some limited number of systems. With the increase in requests in their application, the load also increases. So, to handle the load the corporation has to buy more systems almost on a regular basis. Realizing the need to cut down the expenses on systems, they decided to move their infrastructure to AWS.

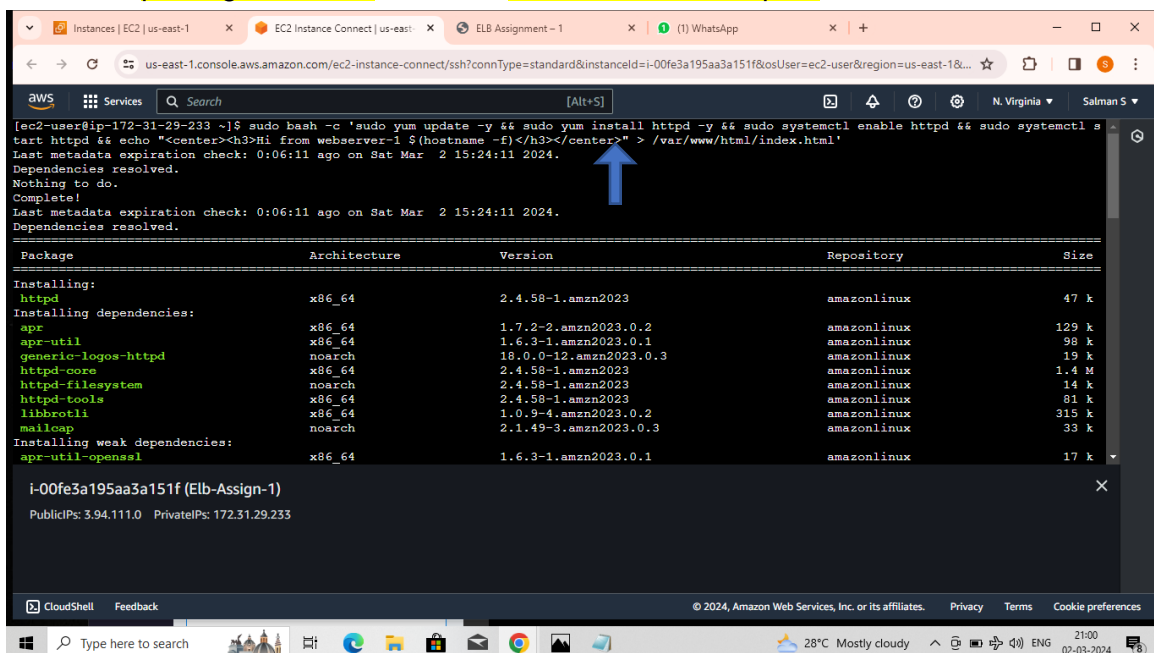
Tasks To Be Performed:

1. Create a Classic Load Balancer and register 3 EC2 instances with different web pages running in them.
2. Migrate the Classic Load Balancer into an Application Load Balancer.

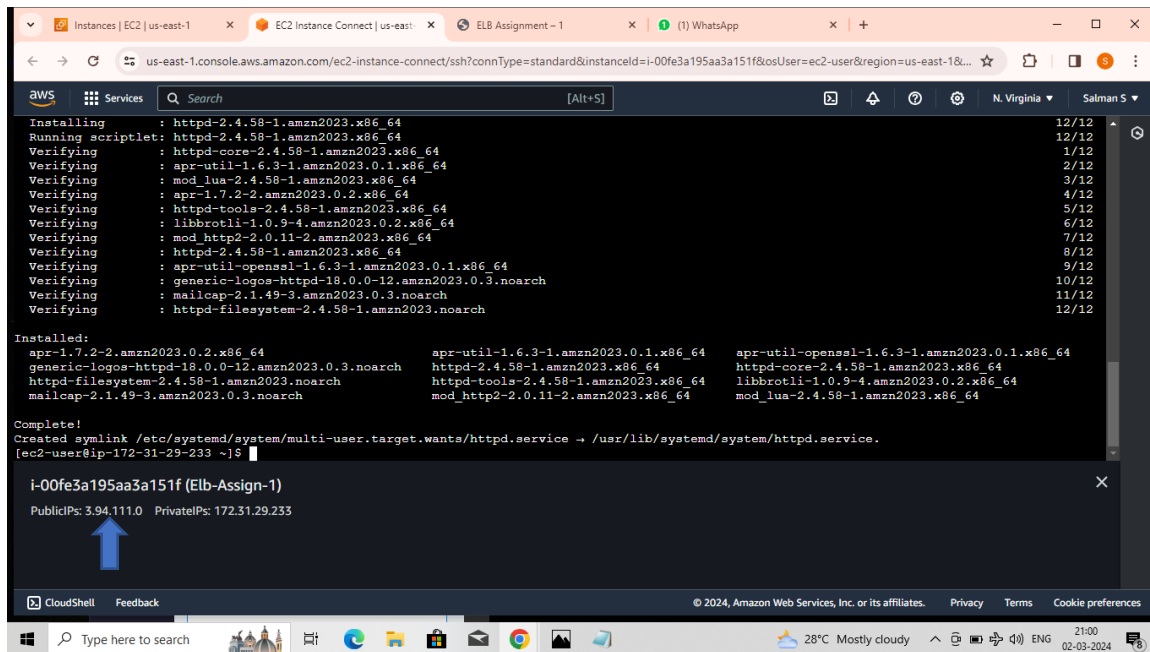
1. Created 3 Instances for ELB



2. `sudo update` using `&&` condition installed `httpd`(Apache Server) and system catalog enabled and started and using `echo` written small line `Hi from WB-1` and and `printing hostname` saved as `html` and located in `path`.

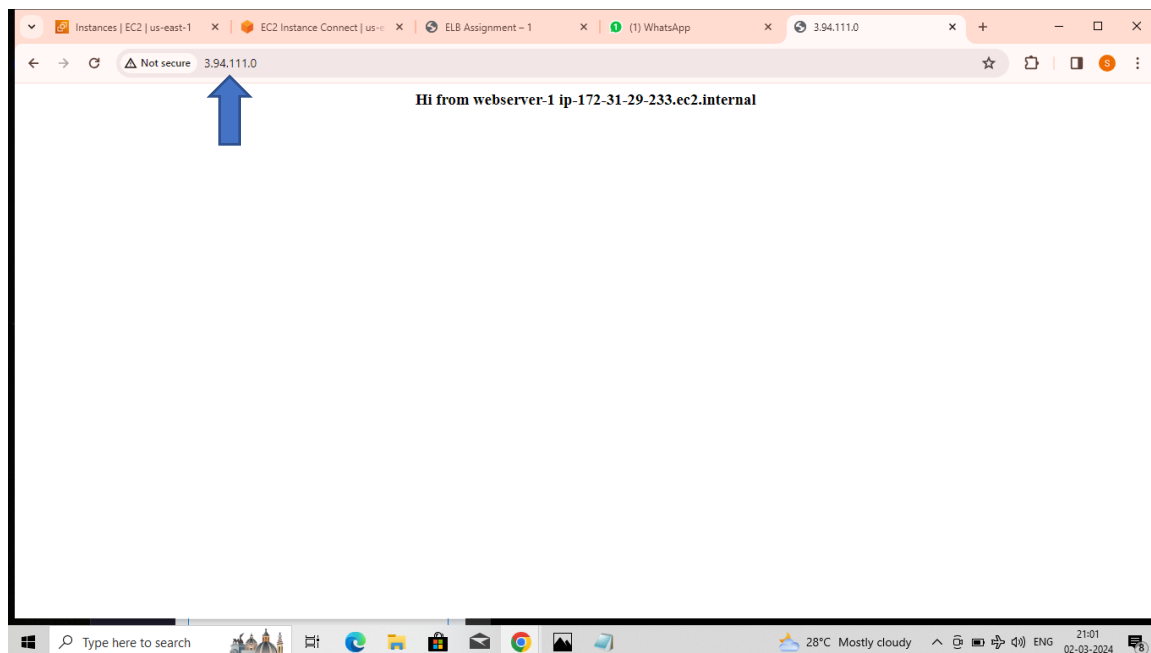


3. Successfully completed the Assignment **configuration**

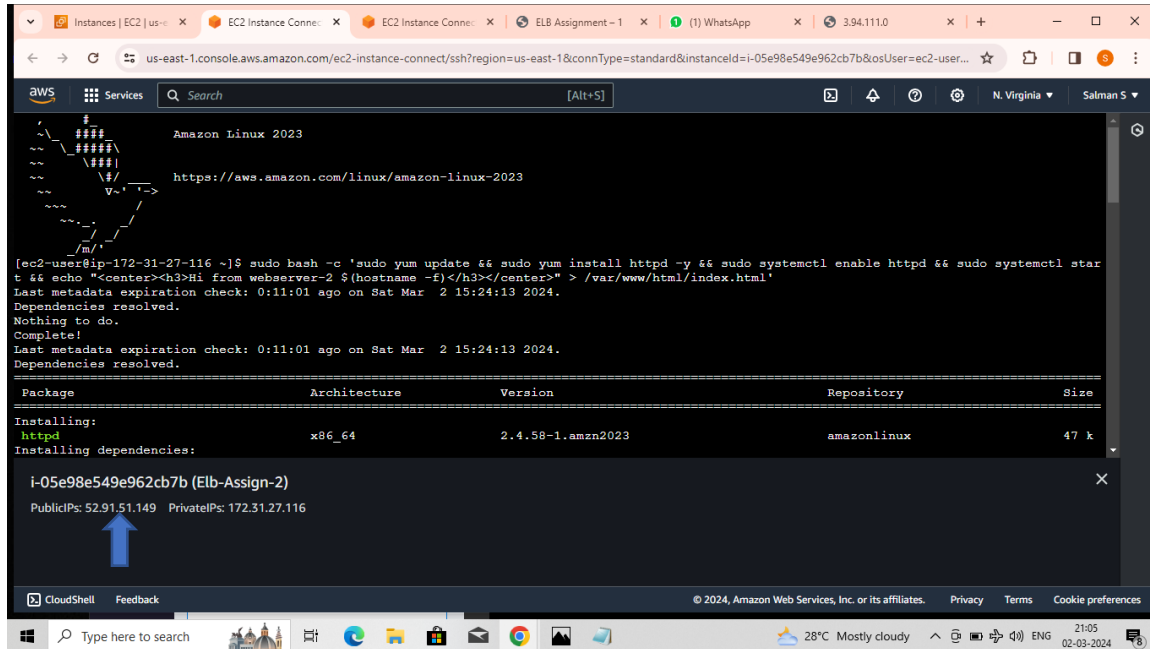


The screenshot shows the AWS CloudShell terminal interface. The terminal output displays a list of installed and verified packages, including httpd, apr-util, mod_lua, and mailcap. A confirmation message states: "Complete! Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service." Below this, the instance ID "i-00fe3a195aa3a151f (Elb-Assign-1)" is shown, along with its public IP "3.94.111.0" and private IP "172.31.29.233". A blue arrow points to the public IP address. The terminal window is titled "i-00fe3a195aa3a151f (Elb-Assign-1)".

4. what we have run in the command we can see in the **web page**



5. 2nd instances doing same config



```
us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-1&connType=standard&instanceId=i-05e98e549e962cb7b&osUser=ec2-user...

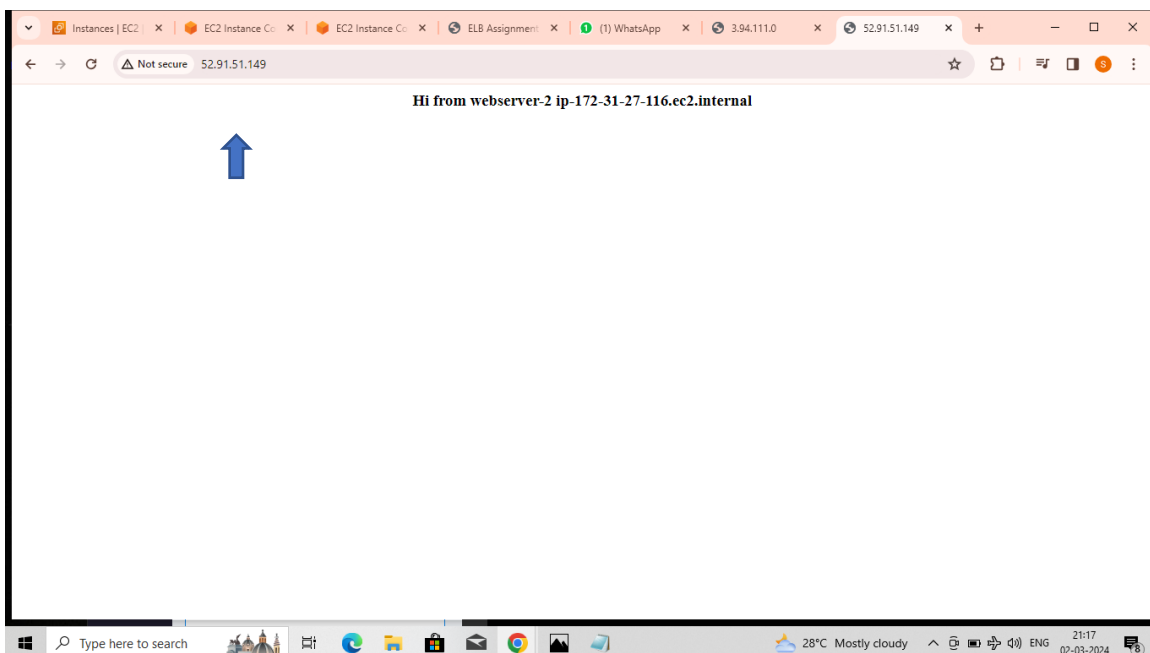
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

[ec2-user@ip-172-31-27-116 ~]$ sudo bash -c 'sudo yum update && sudo yum install httpd -y && sudo systemctl enable httpd && sudo systemctl start && echo "<center><h3>Hi from webserv-2 $(hostname -f)</h3></center>" > /var/www/html/index.html'
Last metadata expiration check: 0:11:01 ago on Sat Mar 2 15:24:13 2024.
Dependencies resolved.
Nothing to do.
Complete!
Last metadata expiration check: 0:11:01 ago on Sat Mar 2 15:24:13 2024.
Dependencies resolved.

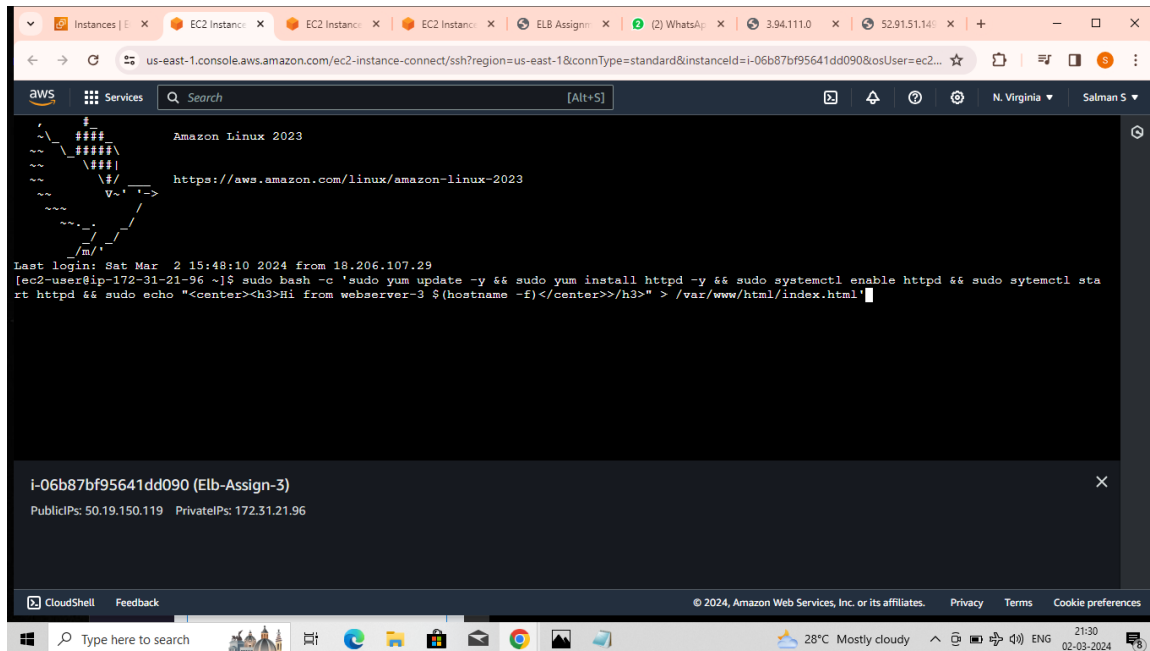
Package Architecture Version Repository Size
Installing:
httpd x86_64 2.4.58-1.amzn2023 amazonlinux 47 k
Installing dependencies:

i-05e98e549e962cb7b (Elb-Assign-2)
PublicIPs: 52.91.51.149 PrivateIPs: 172.31.27.116
```

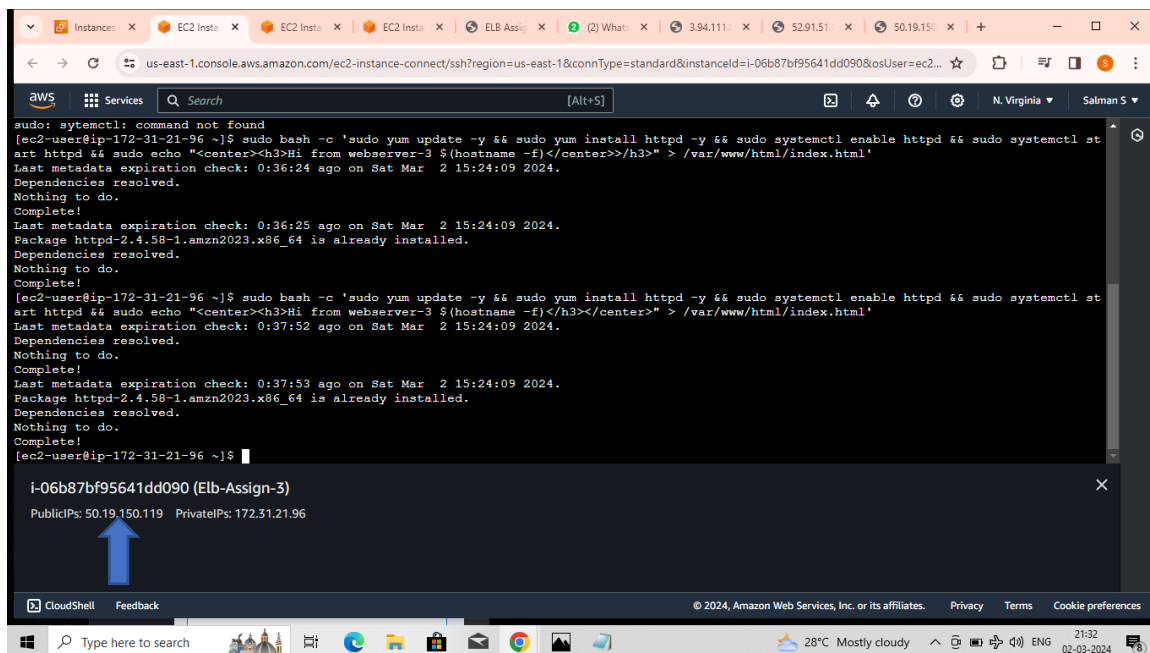
6. What we have run in the command we can see in the web page



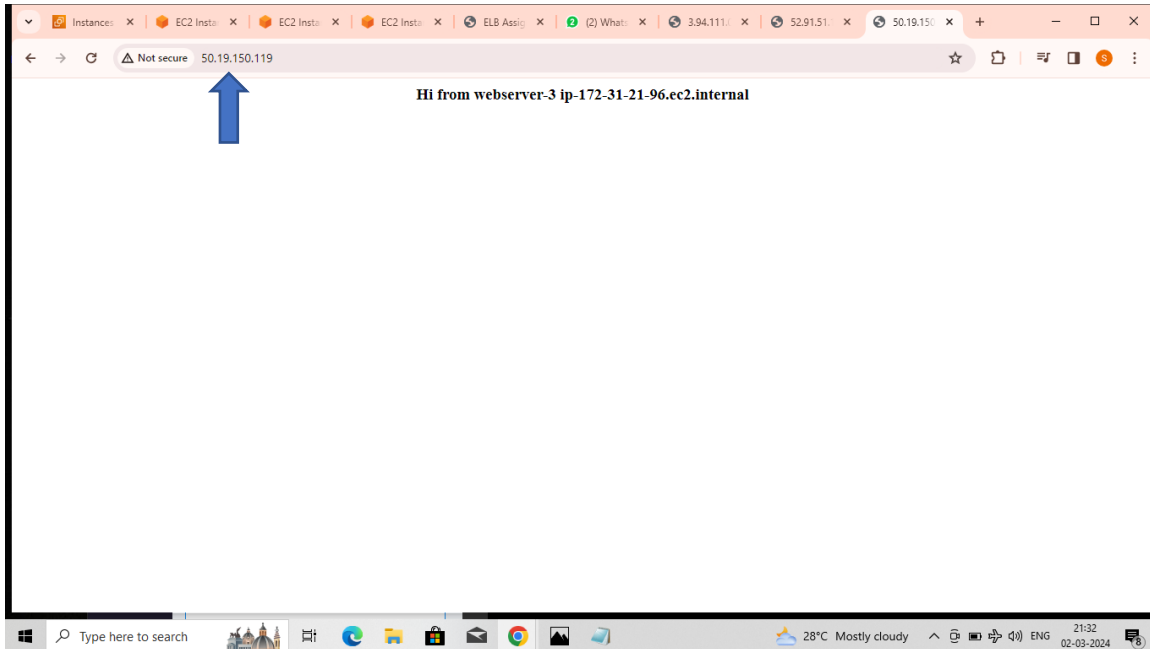
7. Configuring for 3rd instances



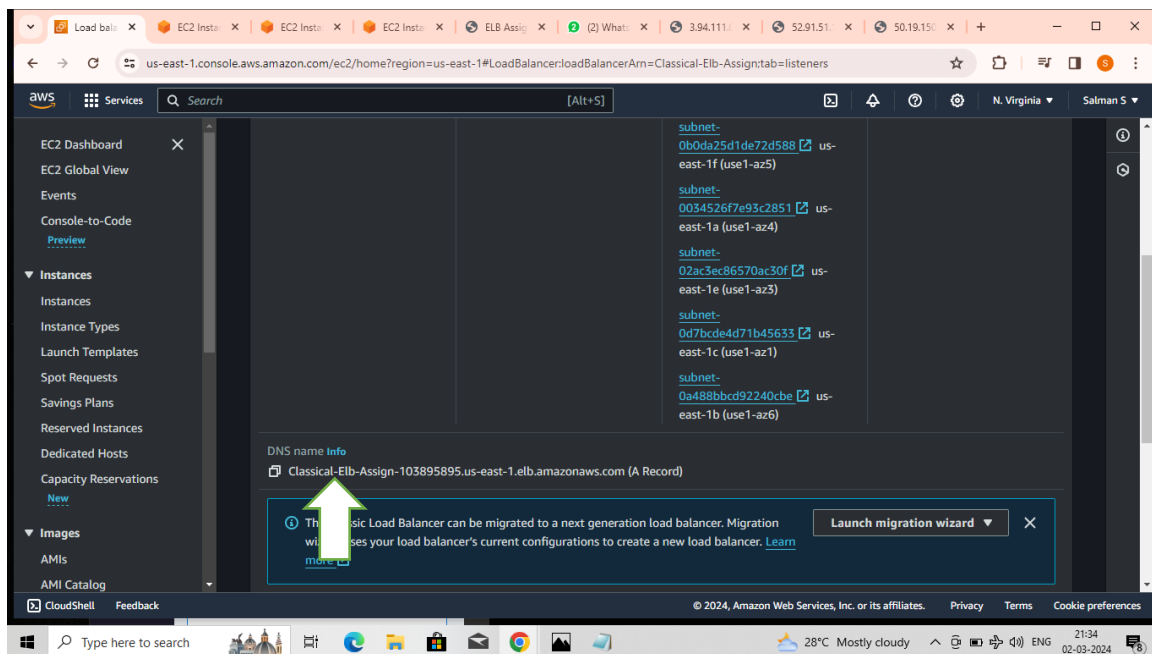
8. Successfully completed after sorting some mistake



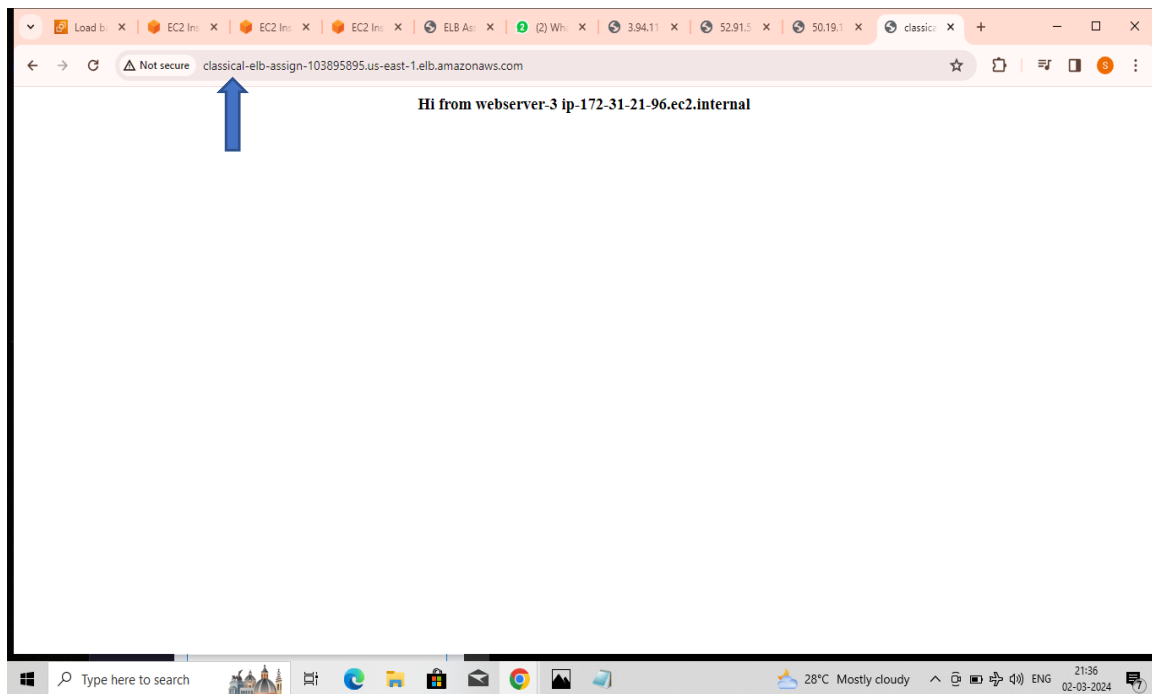
9. successfully created 3 ec2 instances and completed the httpd configuration in the 3 instances



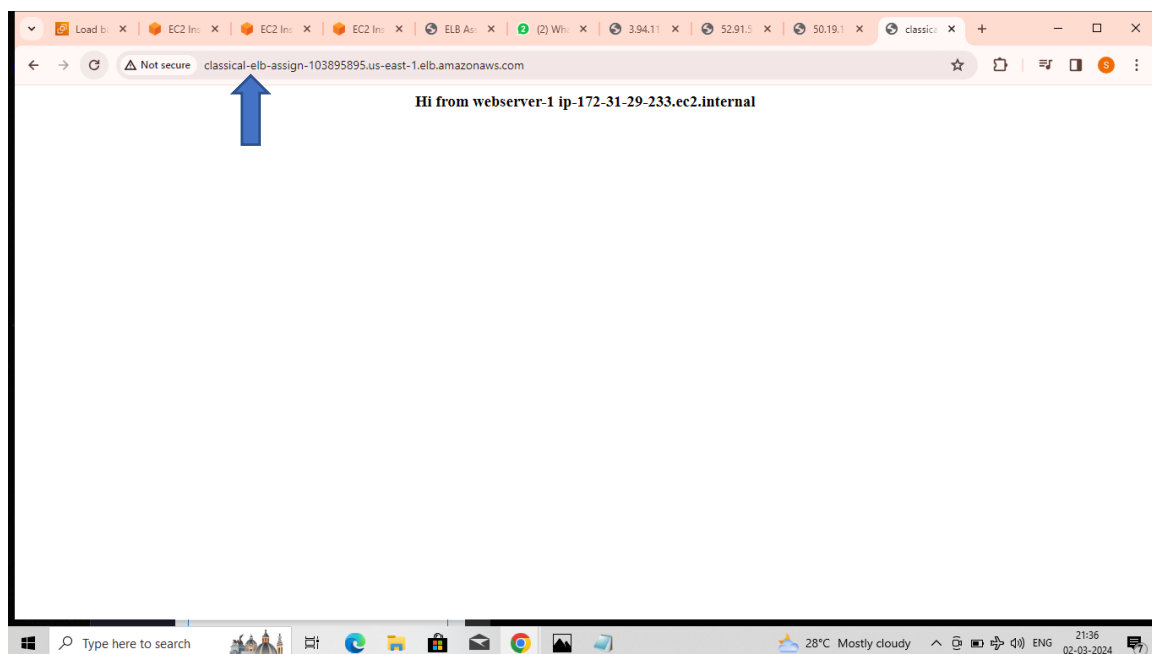
10. Now created Classical Load Balancer



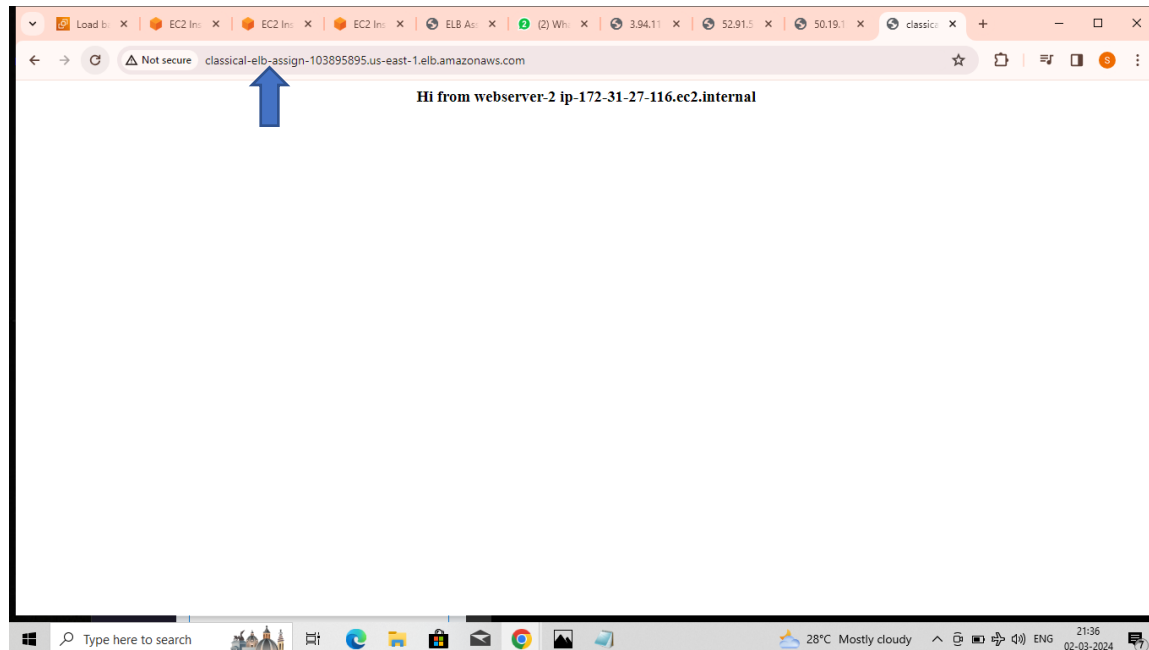
11. After Copying **DNS from CELB** and Hiding our Public IP and Its created ELB DNS



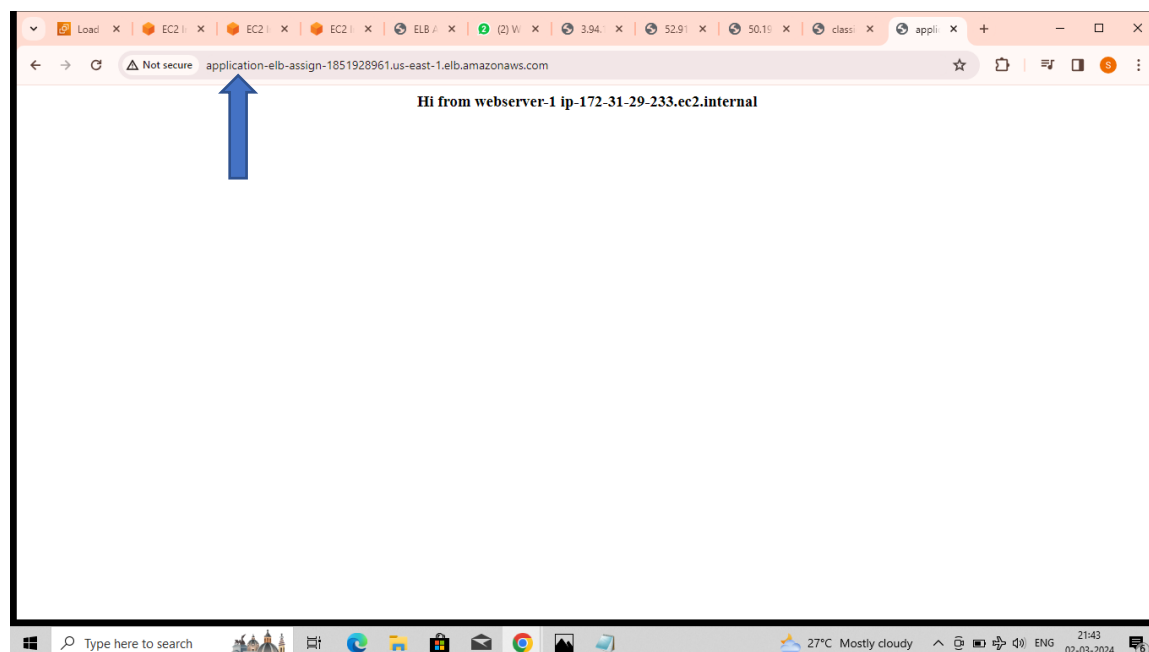
12. After Refreshing, its displaying another server because **we attached 3 Instances manually While Creating Classical Load Balancer**



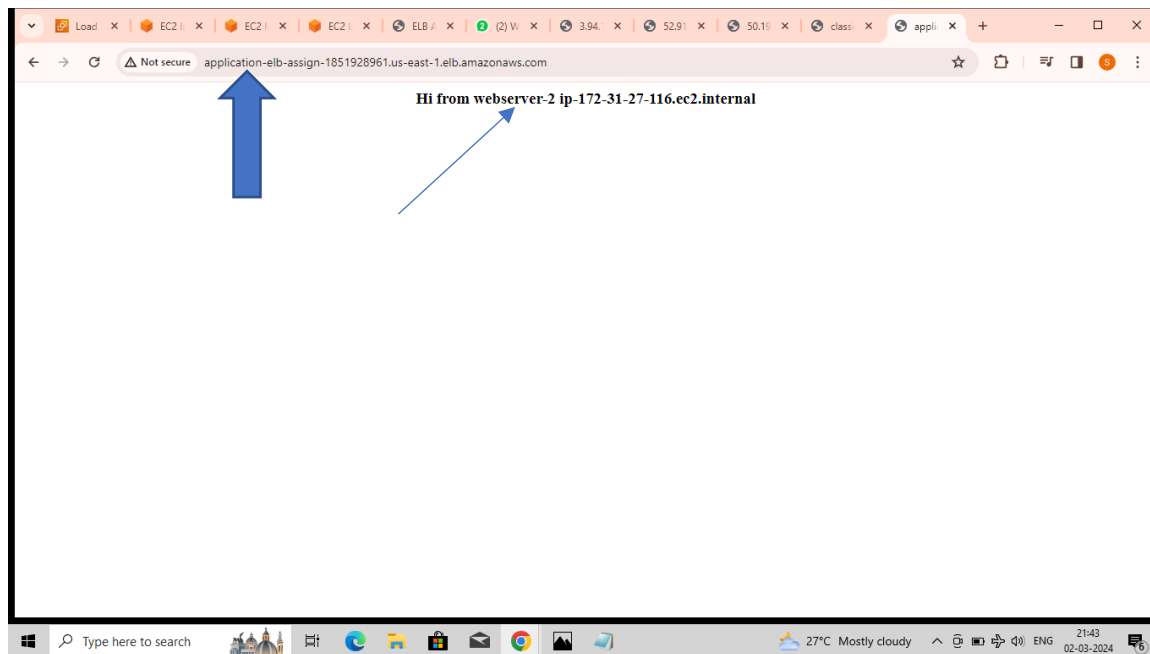
13. After Refreshing, Showing 3rd Web Server and like its distributing the Load



14. And we Migrate to Application Load Balancer



15. Displaying another Webserver-2



16. displaying another Webserver-3, Assigned Task Completed

