EXPERIMENT 4

AIM: To study and implement Platform as a Service using AWS Elastic Beanstalk / Microsoft Azure App Service
CO2: Analyze various cloud computing service models and implement them to solve the given problems

THEORY :

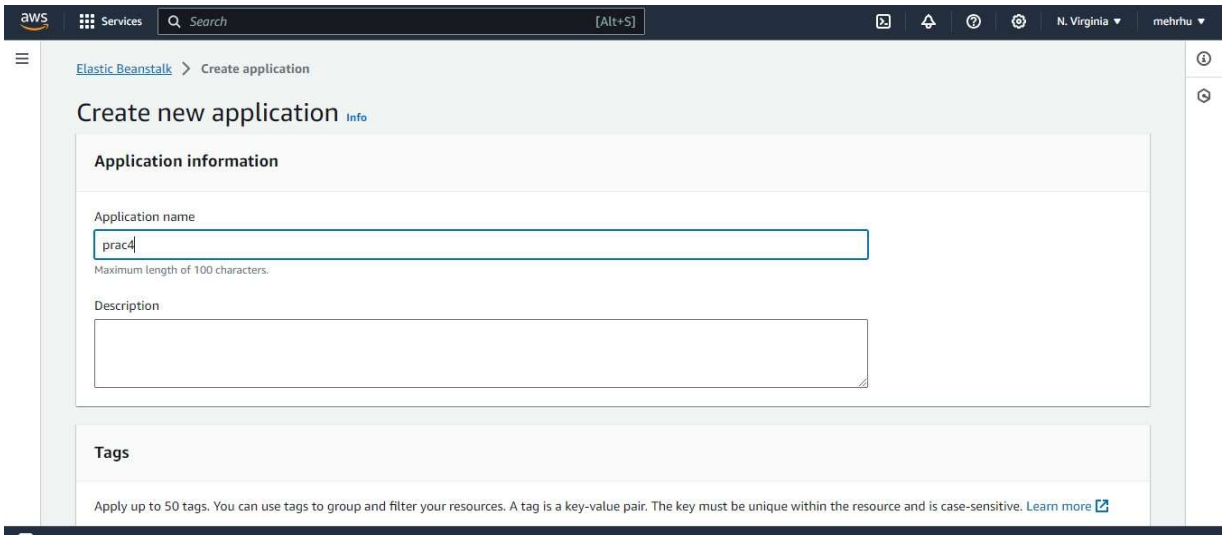
Q]What is AWS?
AWS (Amazon Web Services) is a comprehensive, evolving cloud computing platform provided by Amazon. It includes a mixture of infrastructure-as-a-service (IaaS), platform-as-a-service (PaaS) and packaged software-as-a-service (SaaS) offerings. AWS offers tools such as compute power, database storage and content delivery services.

Q]What is Platform as a Service?
Platform as a Service, also known as PaaS, is a type of cloud computing service model that offers a flexible, scalable cloud platform to develop, deploy, run, and manage apps. PaaS provides everything developers need for application development without the headaches of updating the operating system and development tools or maintaining hardware. Instead, the entire PaaS environment—or platform—is delivered by a third-party service provider via the cloud.
PaaS helps businesses avoid the hassle and cost of installing hardware or software to develop or host new custom applications. Development teams simply purchase pay-as-you-go access to everything they need to build custom apps, including infrastructure, development tools, operating systems, and more.

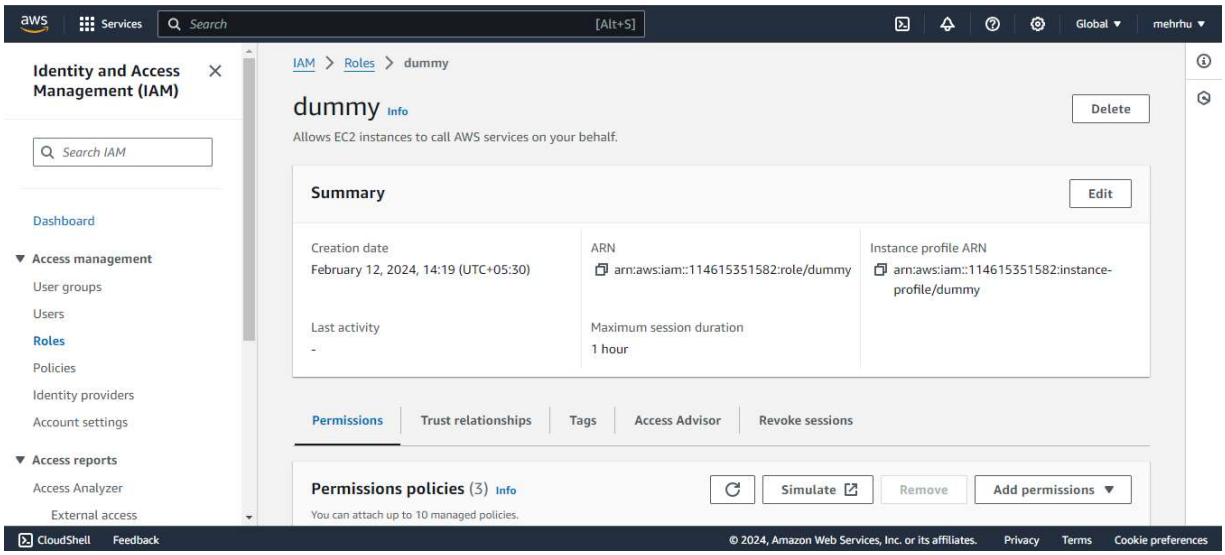
Q]What is AWS Elastic Beanstalk?
AWS Elastic Beanstalk is an AWS-managed service for web applications. Elastic Beanstalk is a pre-configured EC2 server that can directly take up your application code and environment configurations and use it to automatically provision and deploy the required resources within AWS to run the web application. Unlike EC2 which is Infrastructure as a service, Elastic Beanstalk is a Platform As A Service (PAAS) as it allows users to directly use a pre-configured server for their application.

Output:

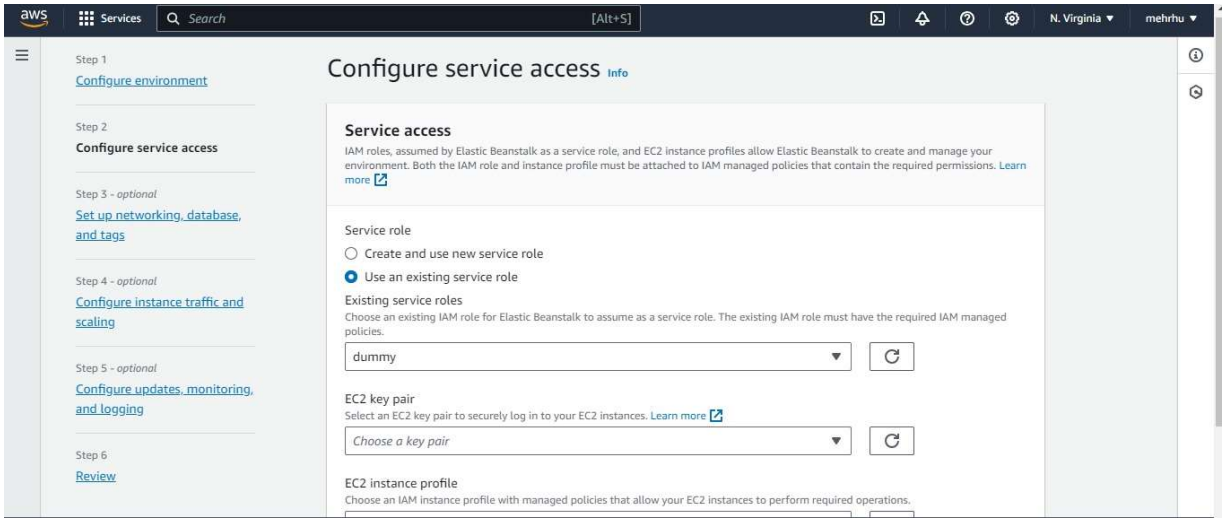
Step1: Open ElasticBeanstalk Dashboard and click on create new application.



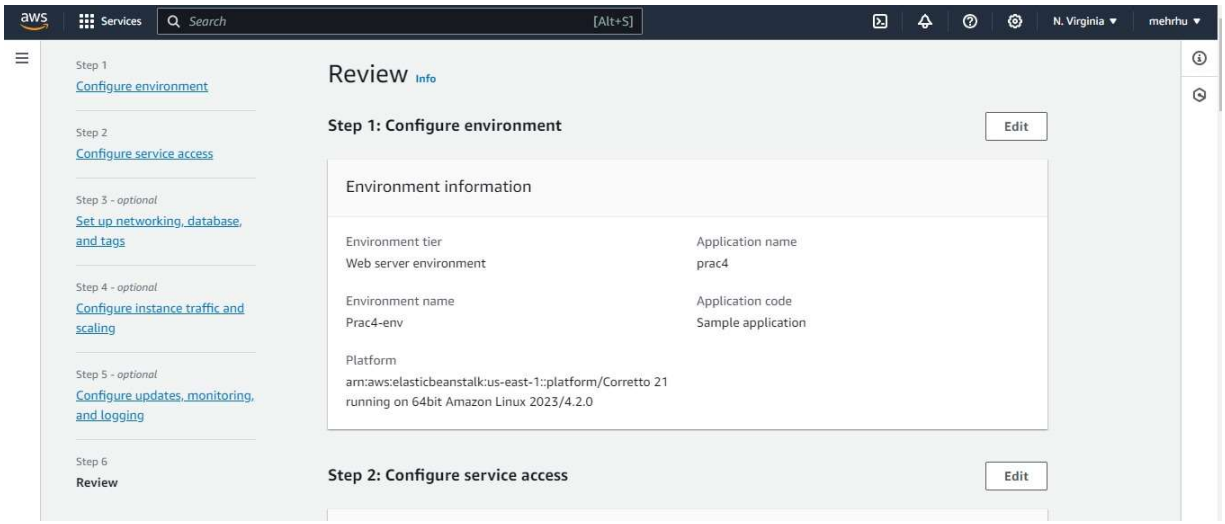
Step 2: Create a service role in IAM console and add required permissions.



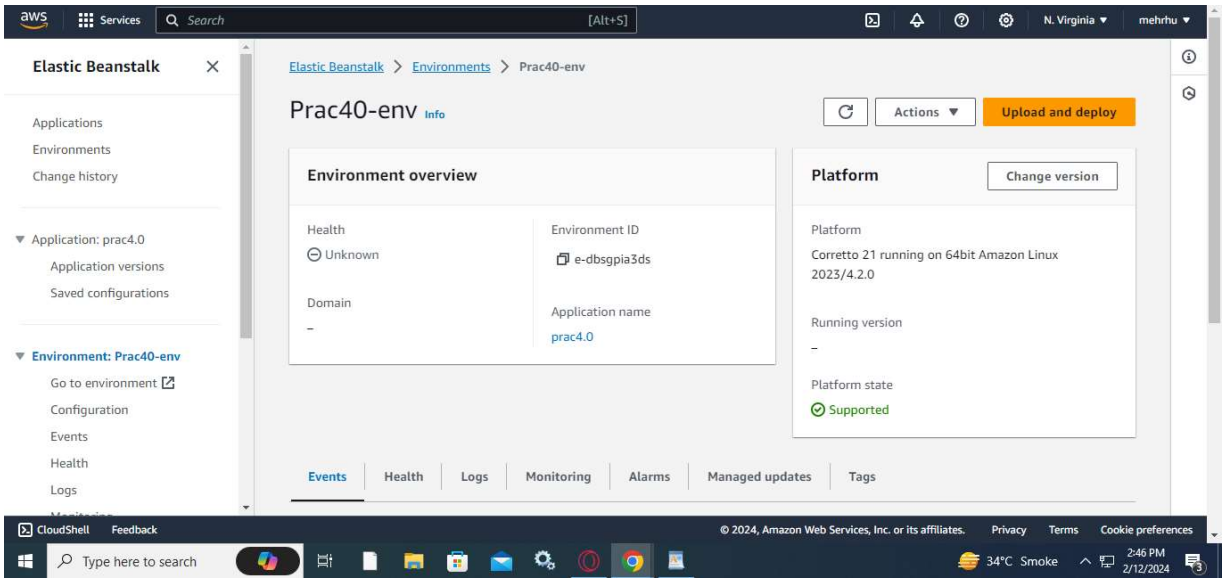
Step 3: Use this role to add to the already existing role in COnfigure service access.



Step 4: Click on skip to review and then on next button.



Step 5: Click on submit and wait for your application environment to step and then upload java zip file of you application and deploy your application.



Conclusion: We have successfully implemented Platform as a Service using AWS ElasticBeanstalk for java application.