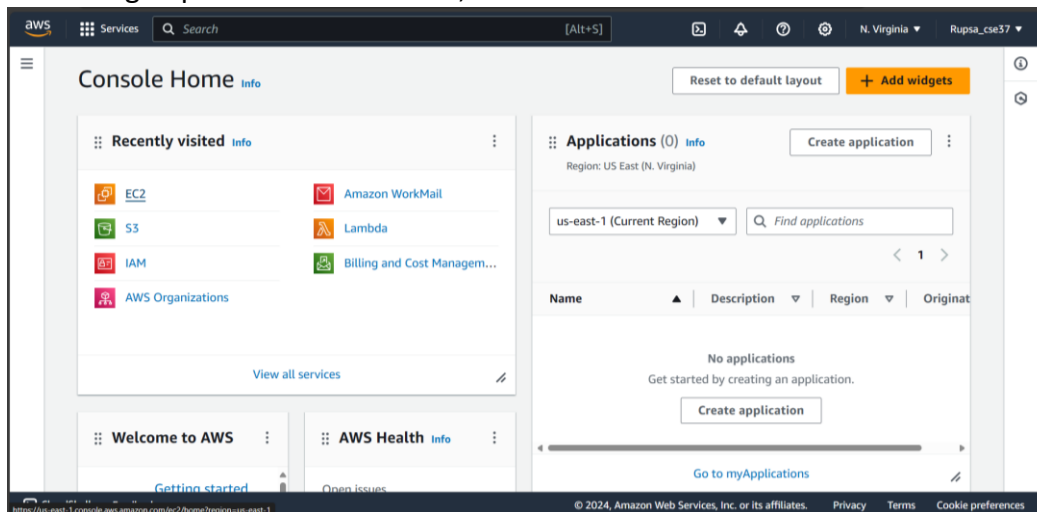


## PROBLEM STATEMENT :

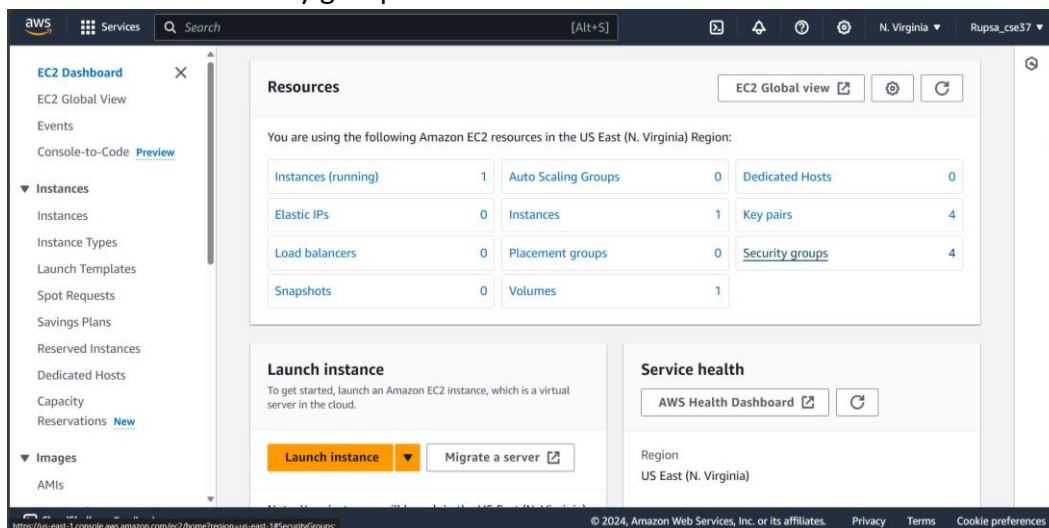
10) Deploy a project from GitHub to EC2 by creating a new security group and user data.

### Steps to deploy project from GitHub to EC2 by creating new security group:

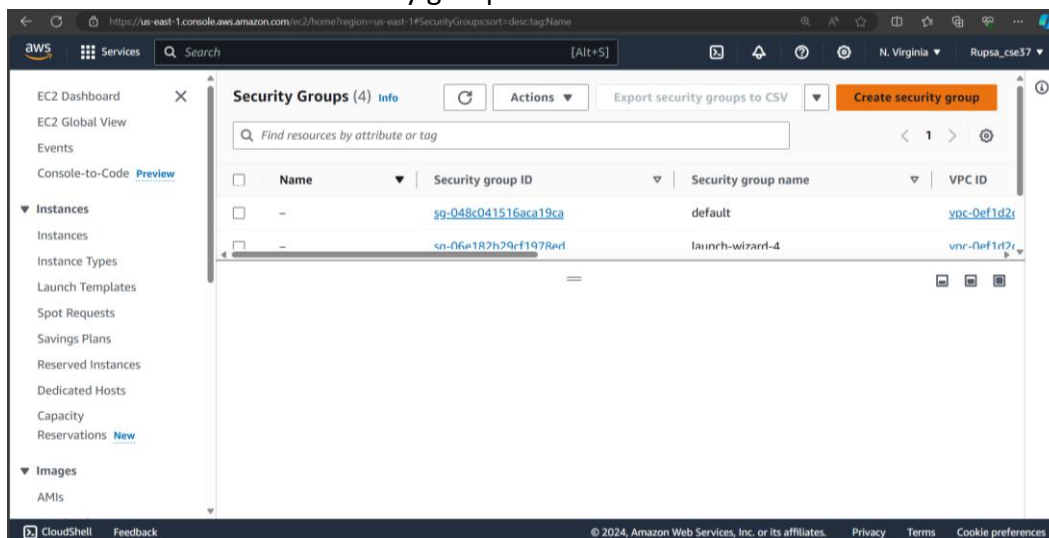
1. Sign up for an AWS account, search for 'EC2' then click on it.



2. Click on security group.



3. Click on "Create security group".



4. Under “Create security group”, give the name & in “Inbound rules” click on “Add rule”.

The screenshot shows the 'Create security group' page in the AWS Management Console. The 'Basic details' section is filled out with the name 'rup\_security', description 'rup\_security', and VPC 'vpc-0ef1d2c86bbf9001'. The 'Inbound rules' section is empty, showing a message 'This security group has no inbound rules.' and an 'Add rule' button.

5. In “Inbound rules” give the four rules given below & in all the rules, the source address of 0.0.0.0/0 and Port range of 4000 to Custom TCP.

The screenshot shows the 'Inbound rules' page for the security group. It displays four rules:

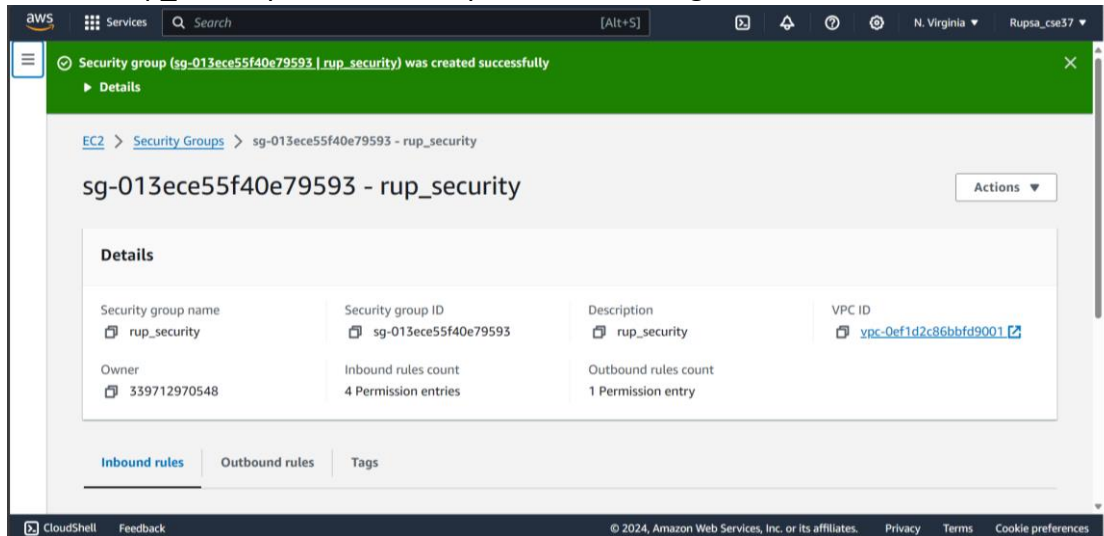
Type	Protocol	Port range	Source	Description - optional
SSH	TCP	22	Any... 0.0.0.0/0	
HTTP	TCP	80	Any... 0.0.0.0/0	
HTTPS	TCP	443	Any... 0.0.0.0/0	
Custom TCP	TCP	4000	Any... 0.0.0.0/0	

Each rule has a 'Delete' button. A warning message at the bottom states: 'Rules with source of 0.0.0.0/0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.'

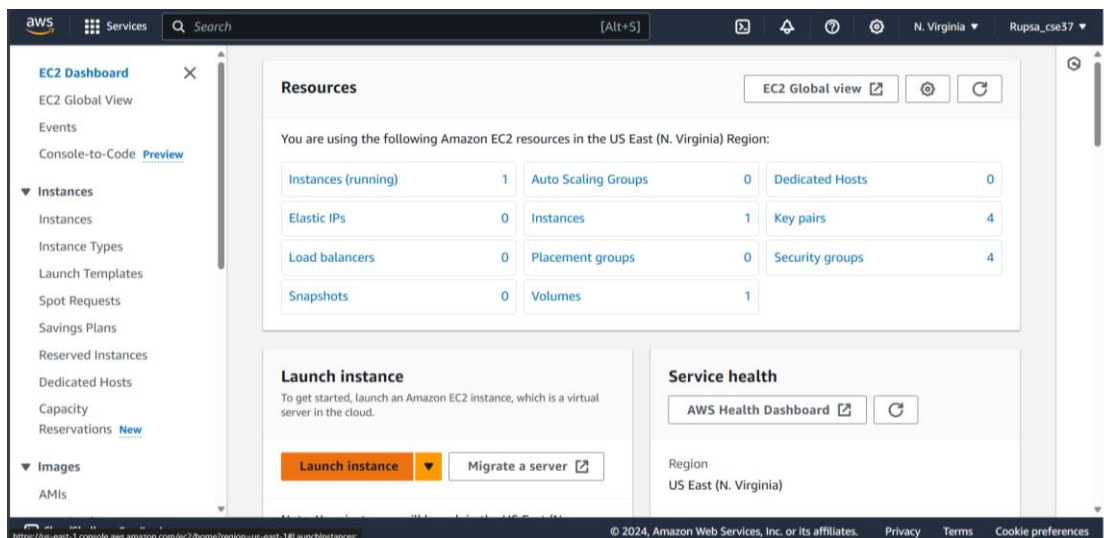
6. Now click on “Create security group”.

The screenshot shows the 'Create security group' page again. The 'Inbound rules' section now shows the four rules added in the previous step. At the bottom, there is a 'Tags - optional' section with an 'Add new tag' button. The 'Create security group' button is highlighted in orange.

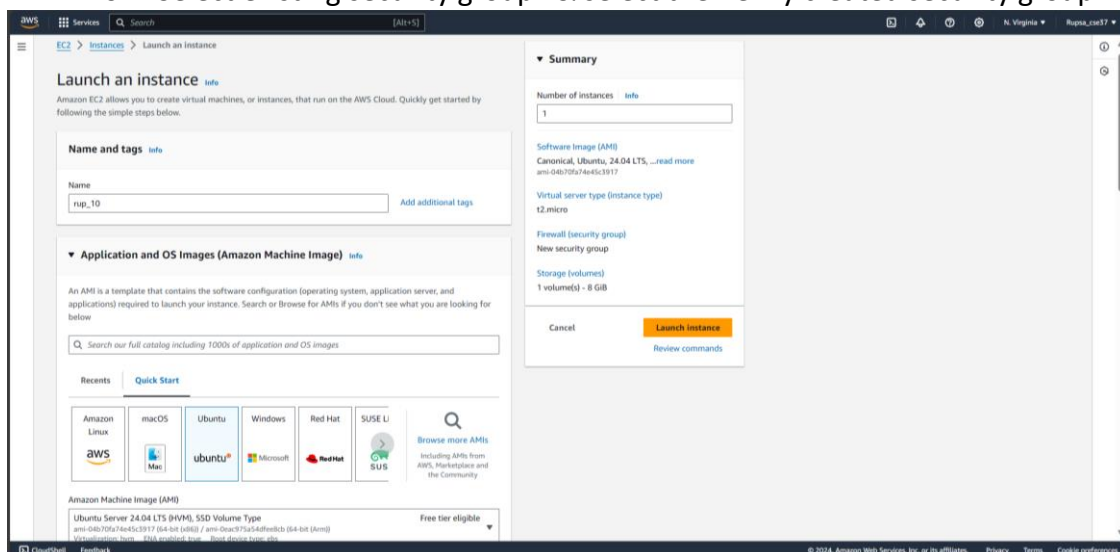
7. “rup\_security” is successfully created & then get back to “EC2 dashboard”.



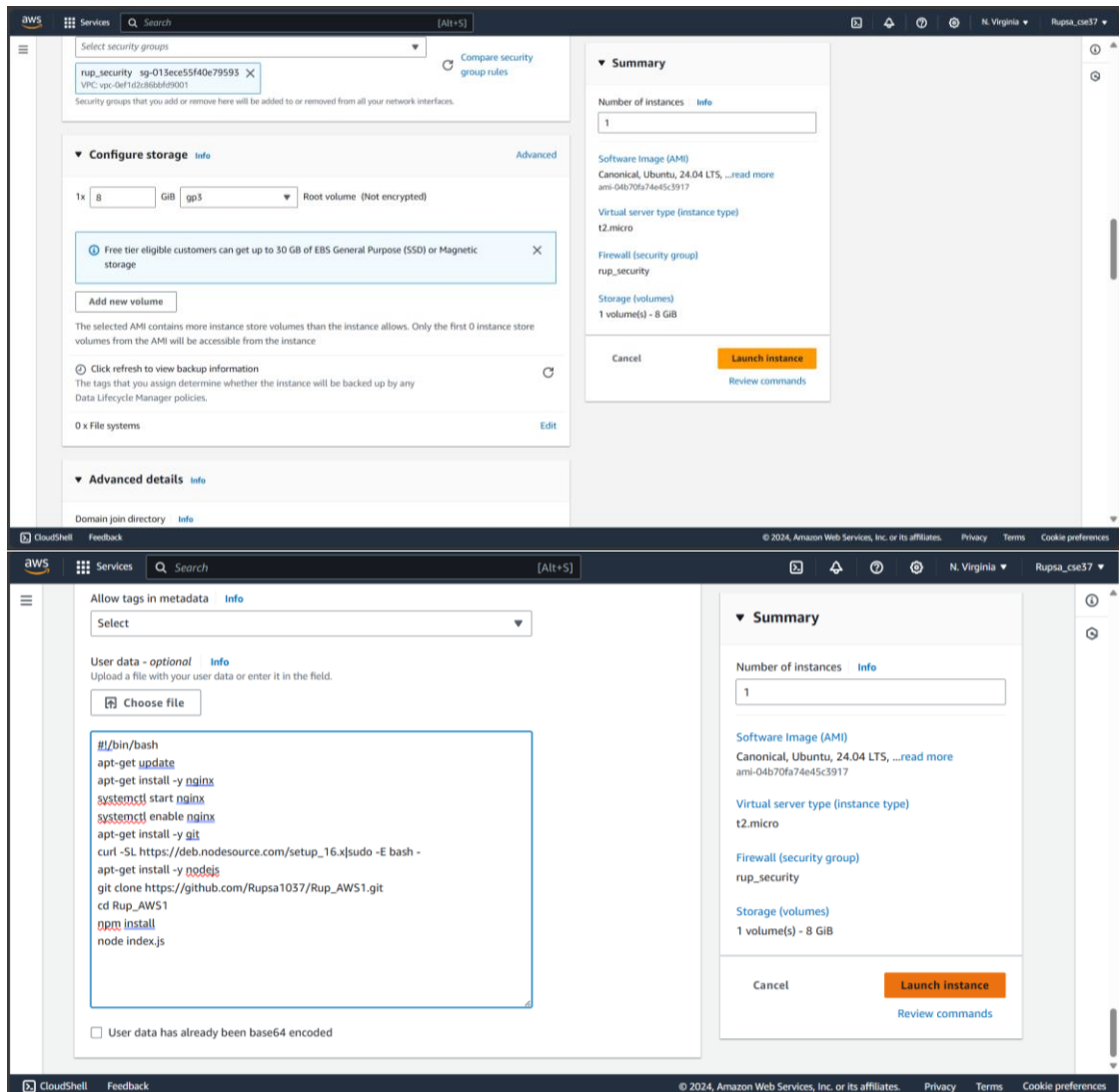
8. Click on “Launch Instance”.



9. Under “Launch instance”, give the name, click on “ubuntu”, select the key\_pair, click on “Select existing security group” & select the newly created security group.



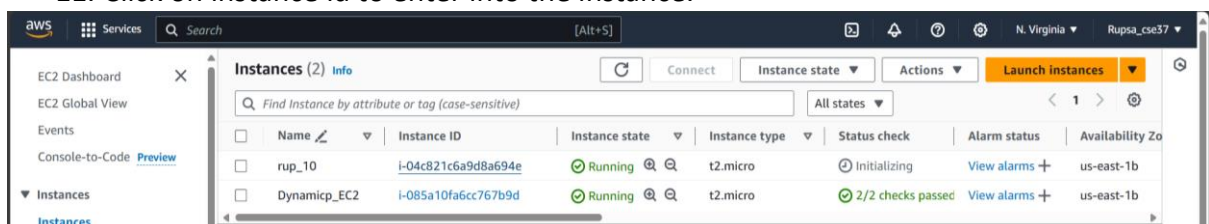
Expand the Advanced Details & scroll down to the bottom, in the bash console type the following commands, give the address & repository name from GitHub. Then click on “Launch Instance”.



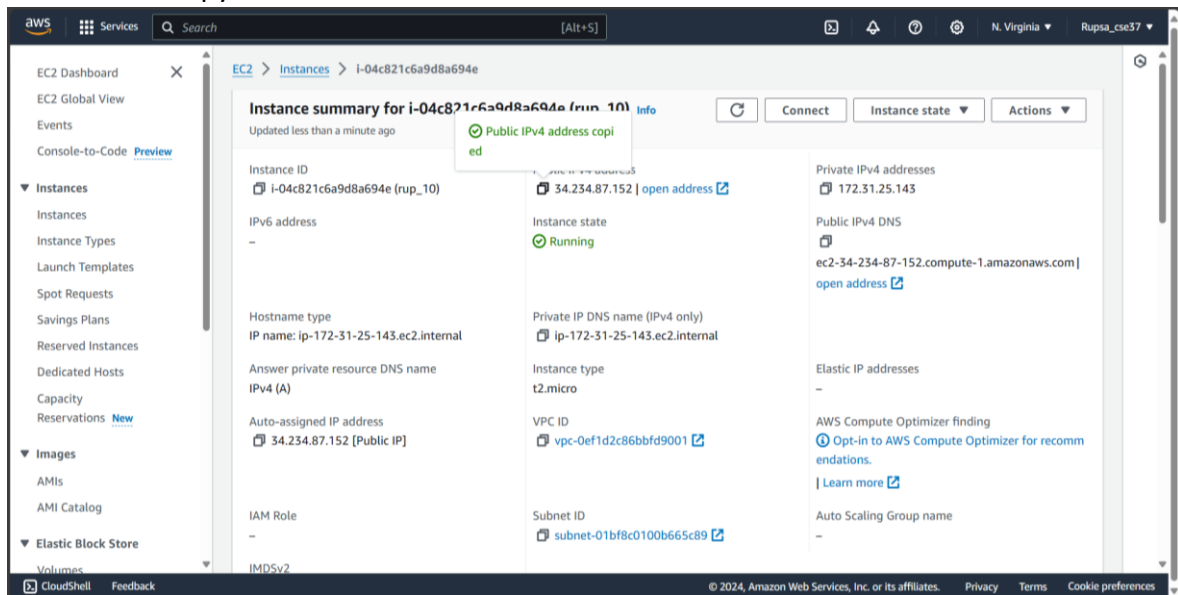
10. Instance is successfully launched.



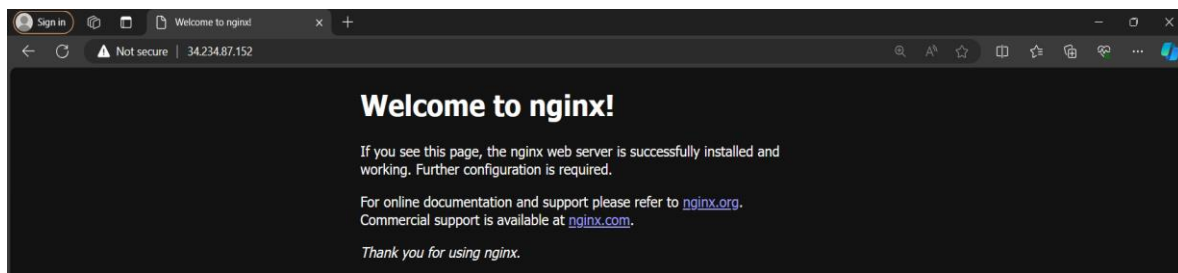
11. Click on instance id to enter into the instance.



12. Now copy the “Public IPv4 address”.



13. Paste the address in a new Window.



14. Now add “:4000” at the end of the IPv4 address and press enter.

