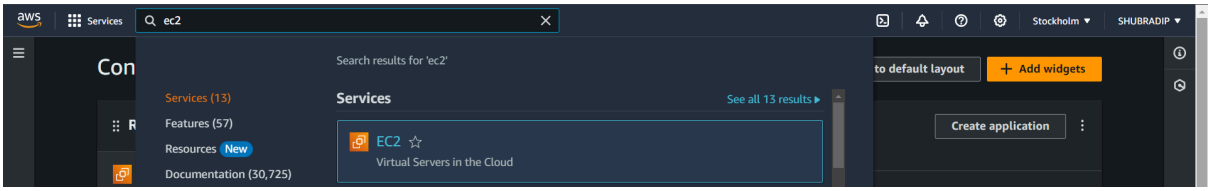
Assignment No:10

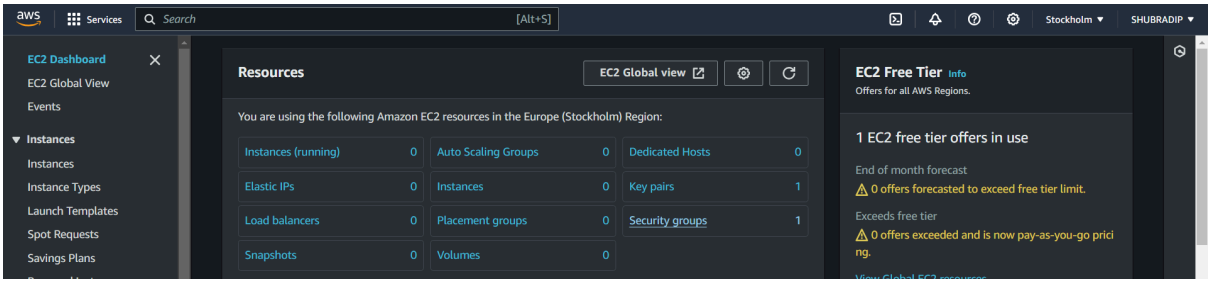
Problem Statement: Deploy a project from EC2 by using a new security group.

The steps are as follows: -

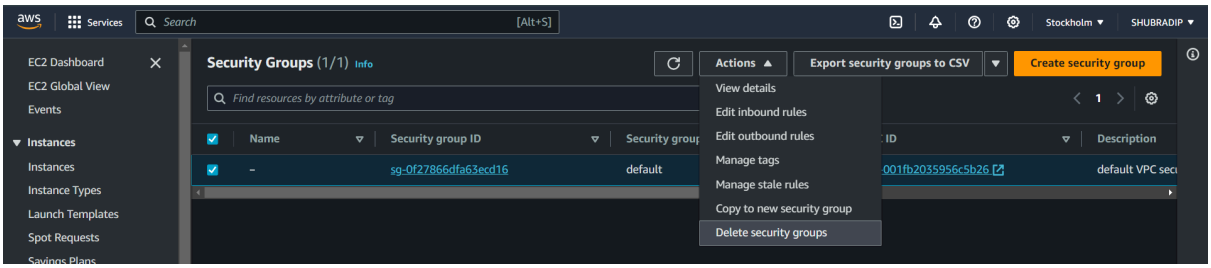
1. Navigate to AWS and locate the EC2 service. Choose the first option listed under the EC2 services.



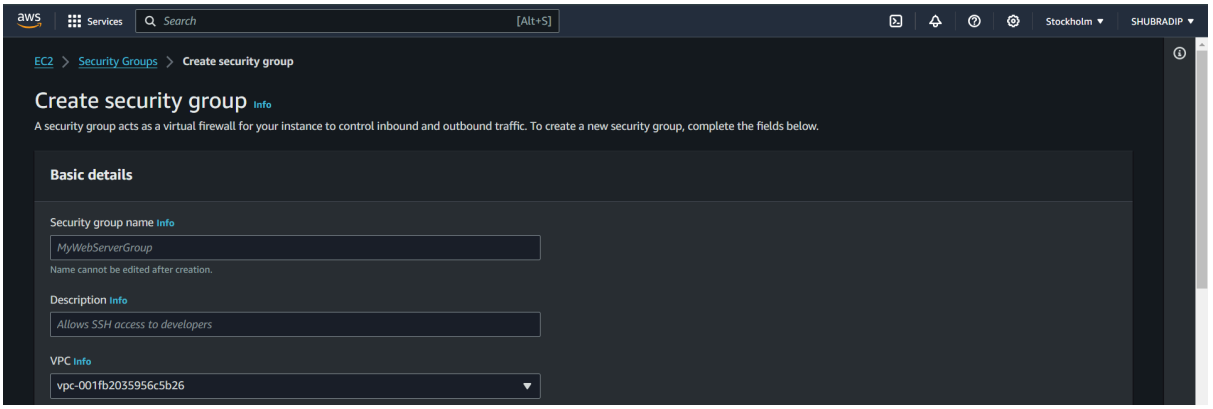
2. Select the "**Security group**" option.



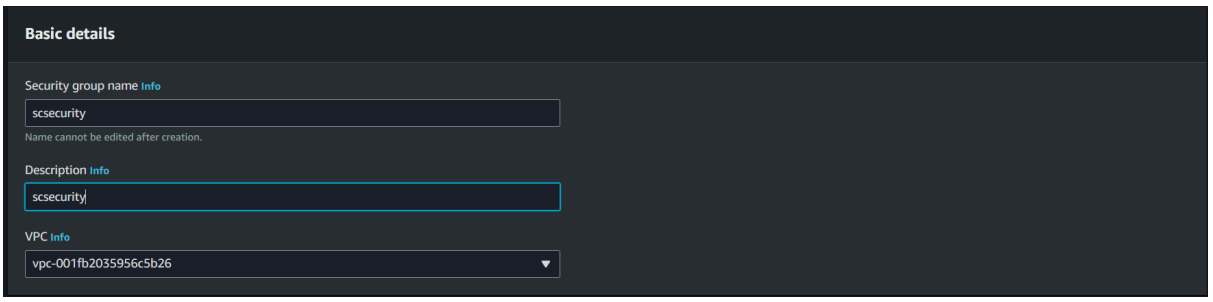
3.If there are any security groups other than the default, please delete them by clicking on "**Actions**" and then selecting "**Delete security group**." Since there are no additional security groups, we can proceed to the next step.



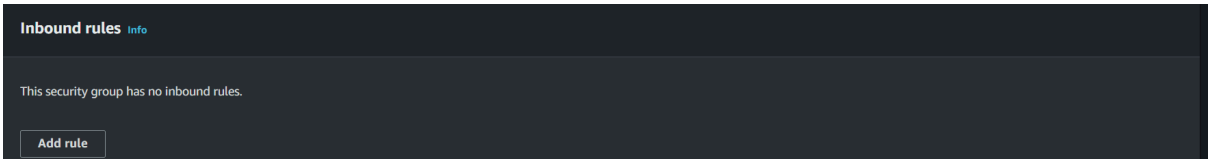
4.Now, select “**create security group”.**



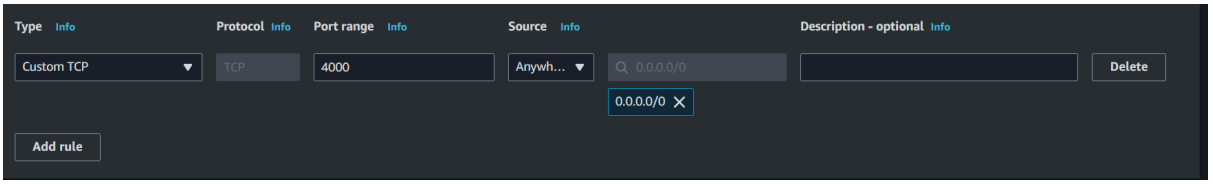
5. Choose an appropriate and valid name for the group (for instance, we've used "**scsecurity**" here). You can also copy the same name into the '**Description**' field, or provide any other relevant information.



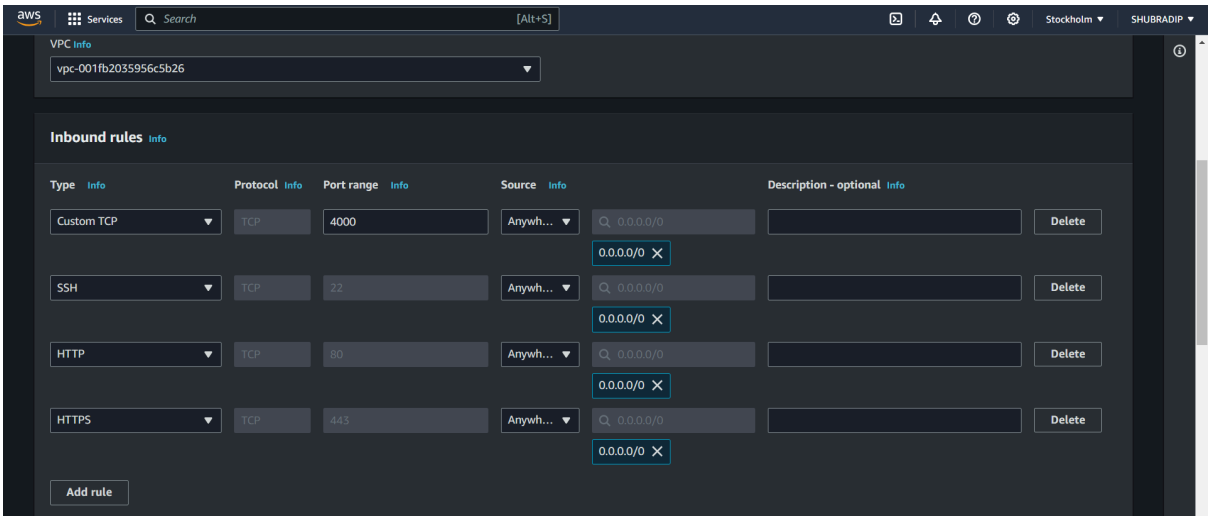
6. Within the '**Inbound rules**' section, select '**Add rule**'.



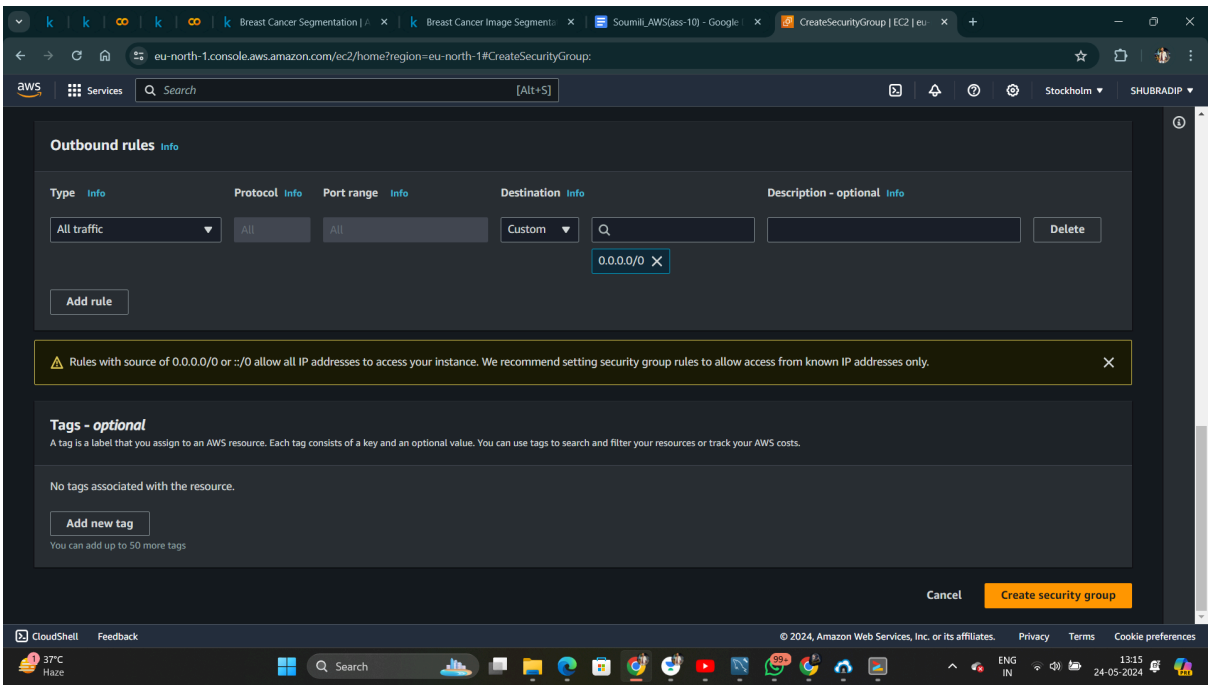
7. Since '**Custom TCP**' protocol is already chosen, input '**4000**' (as specified in the index.js) in the Port range field and select '**0.0.0.0/0**'.



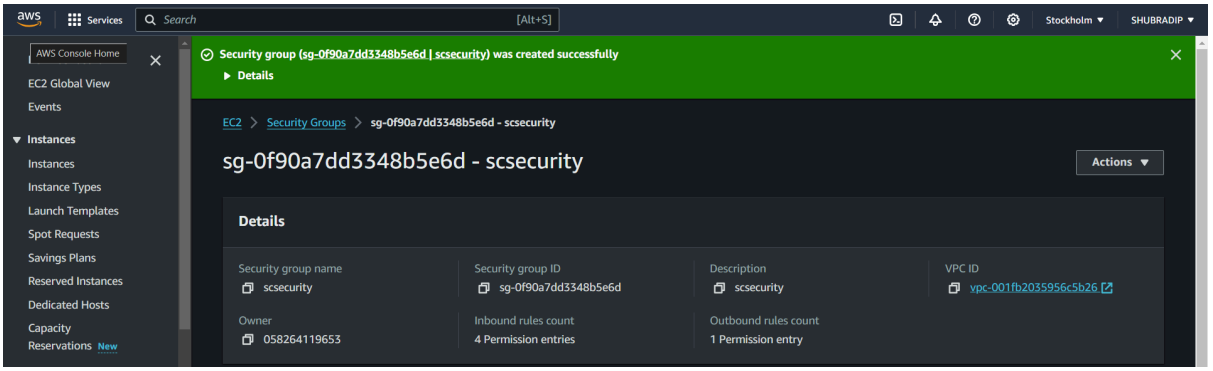
8. Next, include the three protocols **SSH, HTTP, and HTTPS** from the dropdown list. For each protocol, select **'0.0.0.0/0'** and add them as individual rules one by one.



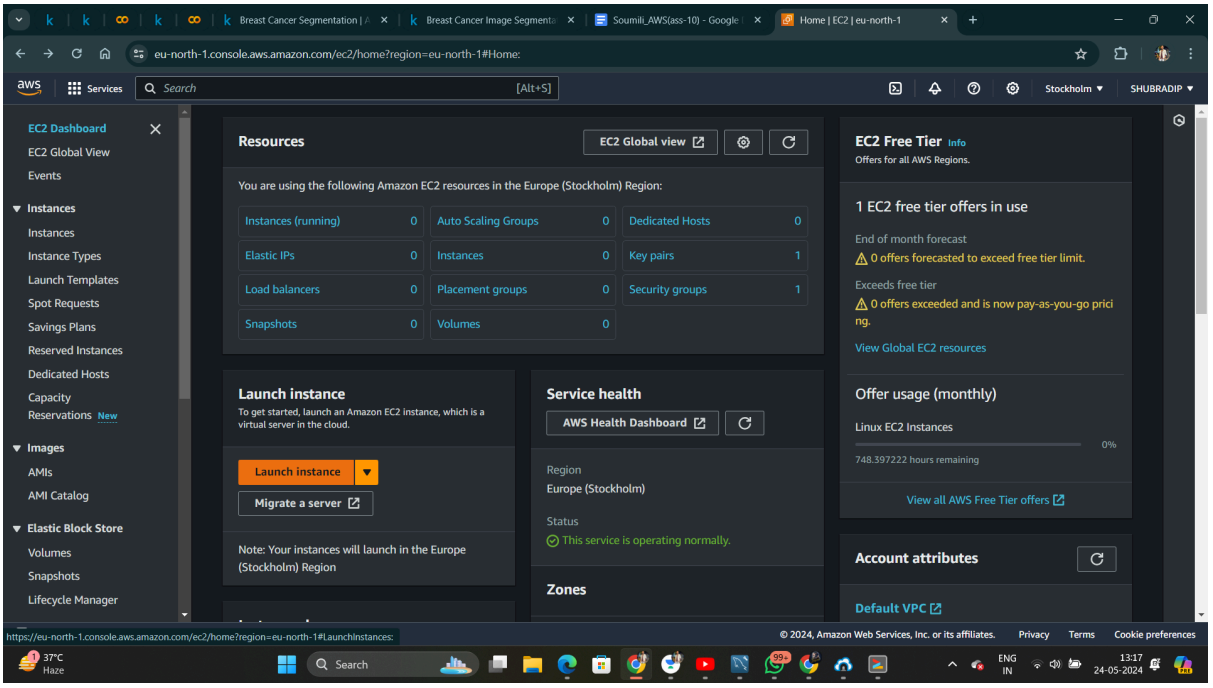
9. Scroll down without making any changes to the Outbound rules, then proceed to click on "**Create security group**".



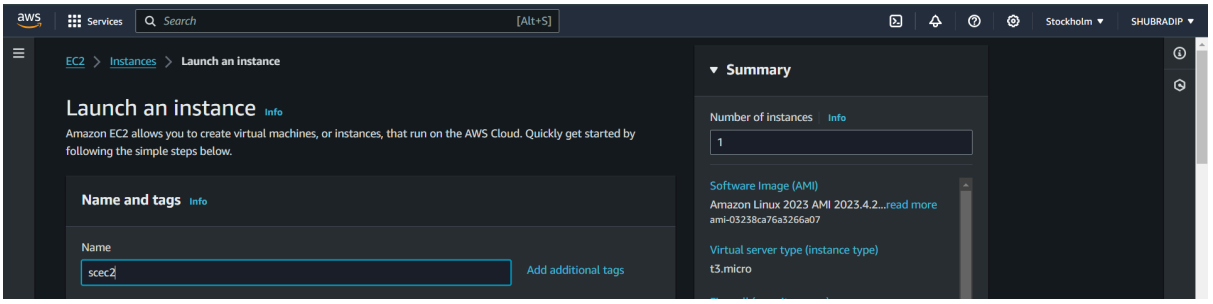
10.The security group is created successfully.



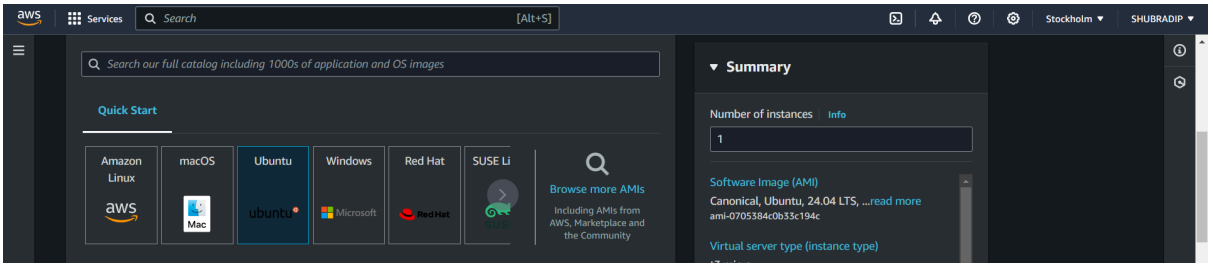
11. Return to the "**EC2 dashboard**" and select "**Launch Instance**".



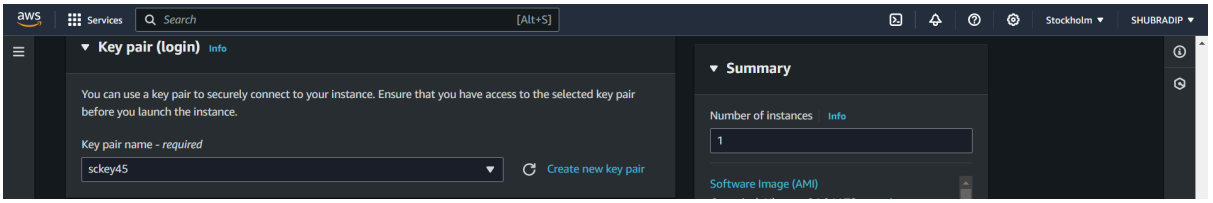
12Enter a suitable and valid name for the instance (for instance, "**scec2**" in this example).



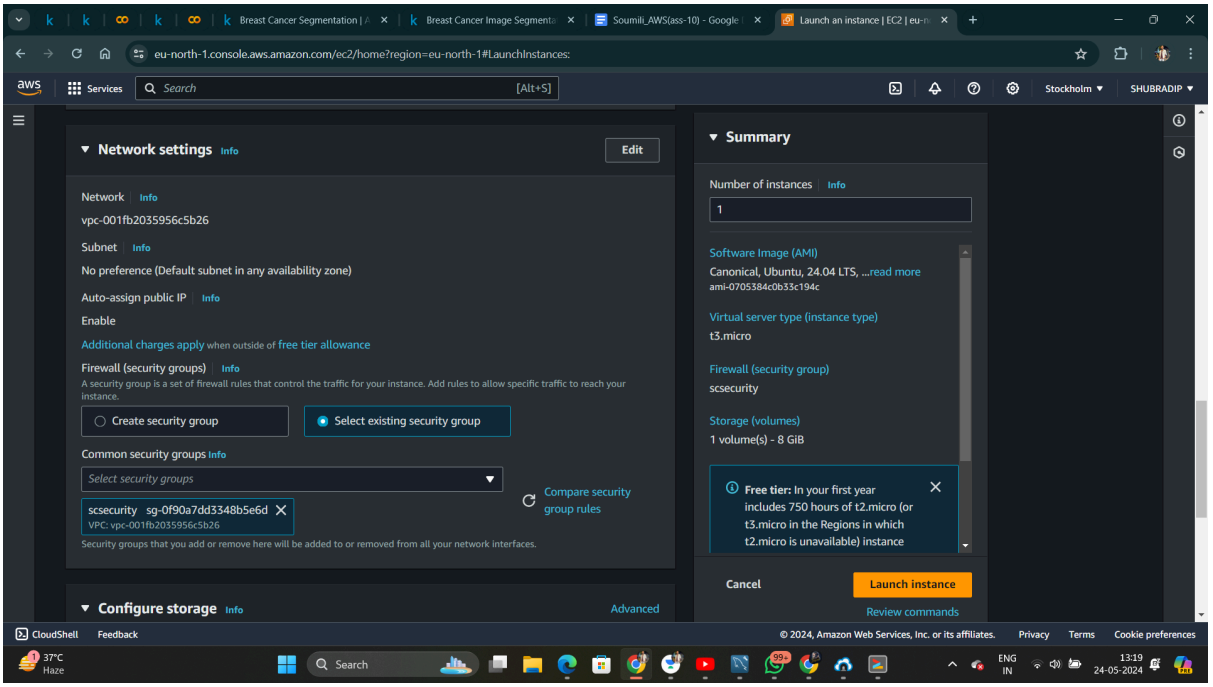
13.Choose "**Ubuntu**" as the AMI from the available options.



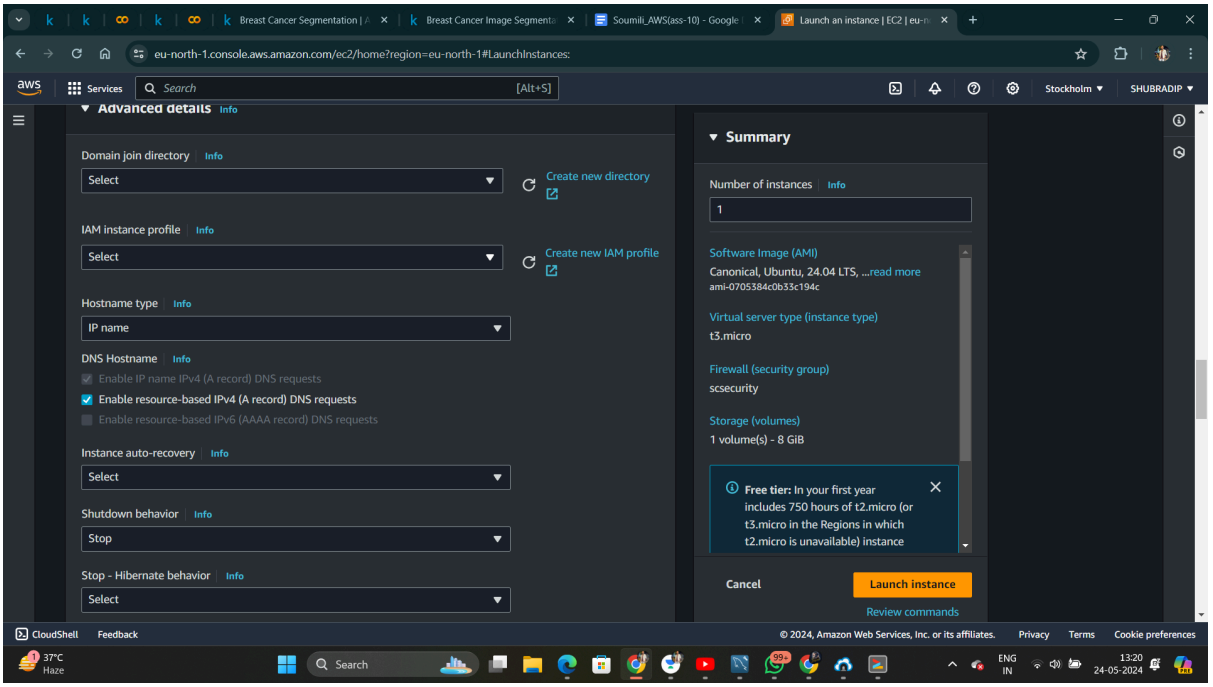
14. Choose an existing key pair, or alternatively, create a new key pair if necessary. In this case, the existing key pair named "**sckey45**" is utilized.



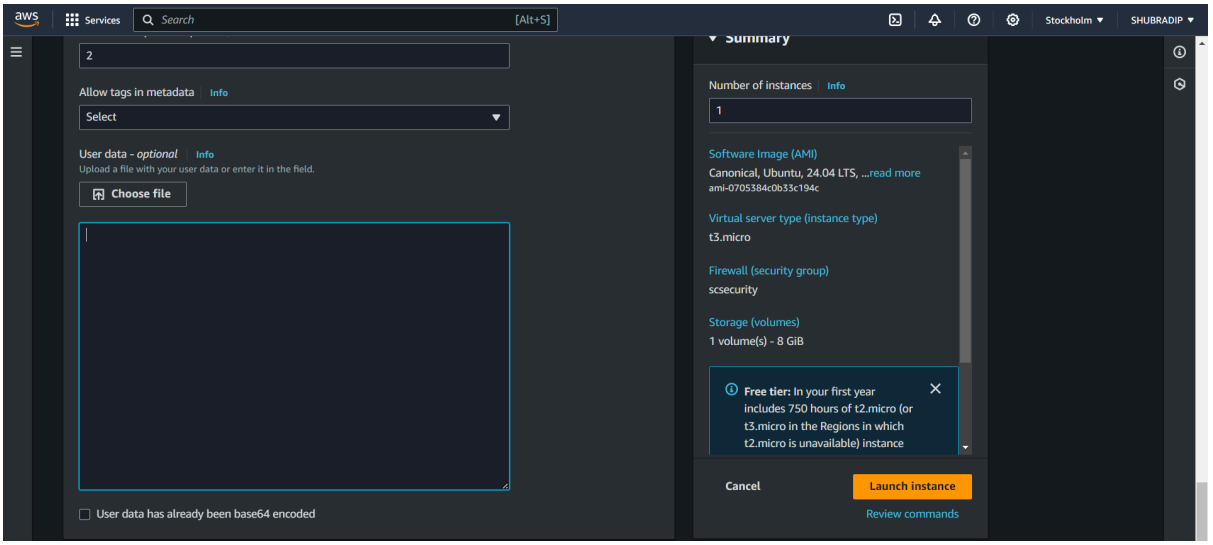
15. Next, click on the "**Select existing security group**" option. From the dropdown menu, choose the existing security group that was created as outlined in the previous steps.



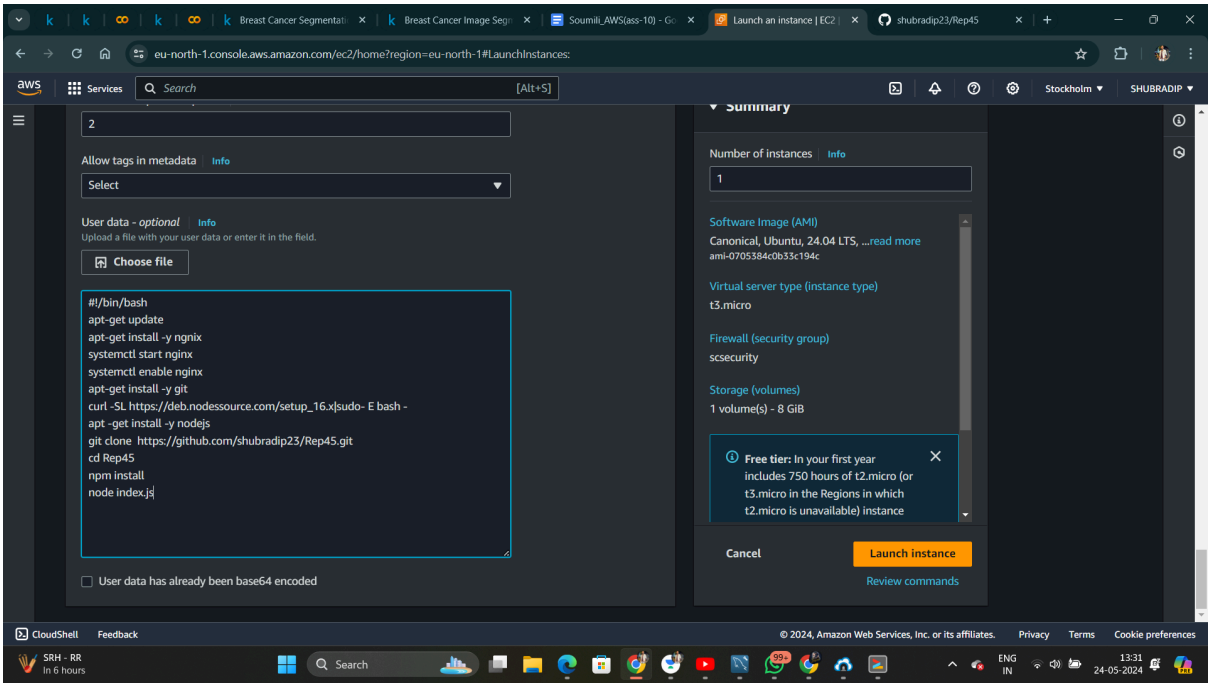
16. Select the dropdown menu for "**Advanced settings**".



17. Scroll down and navigate to the user-data editor.



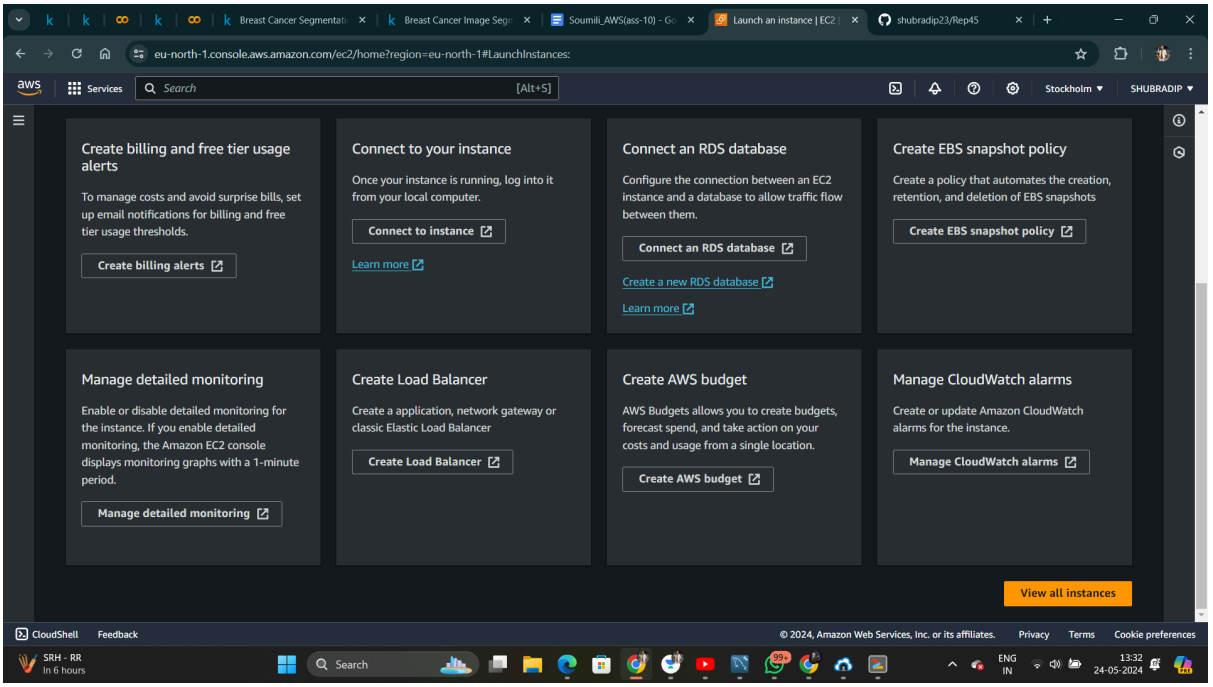
18. Enter the following commands in the editor space as displayed in the subsequent window to establish a connection from the client to the server (without utilizing Bitvise SSH Client). Then, proceed to click on "**launch instance**".



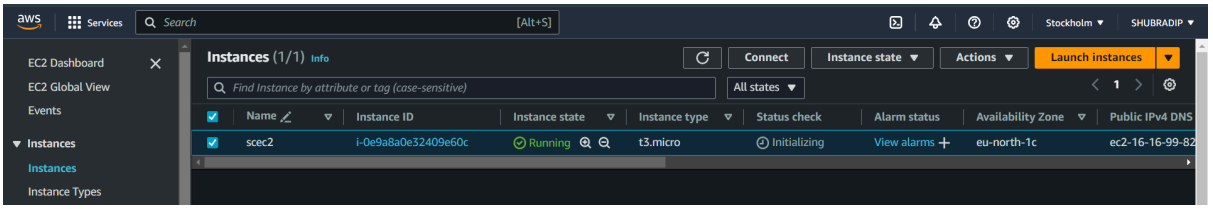
[**Remember: Access your GitHub account and navigate to the repository containing the Index.js file. Copy the repository's path to clone the project.**].

19. The instance has been successfully created utilizing the existing security group.

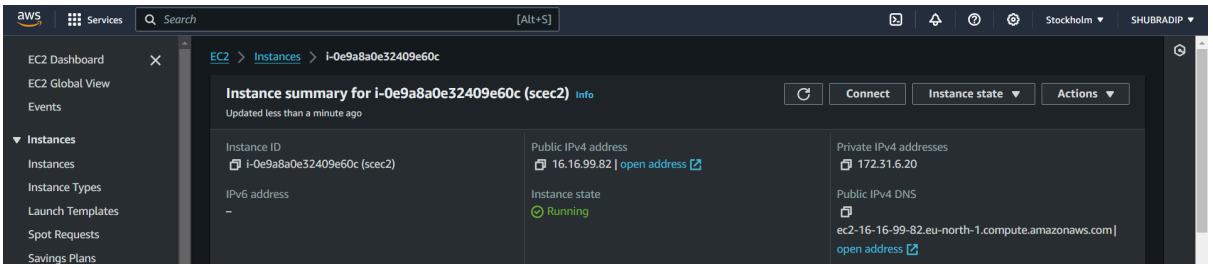
20.Scroll down and click on “**view all instances**”.



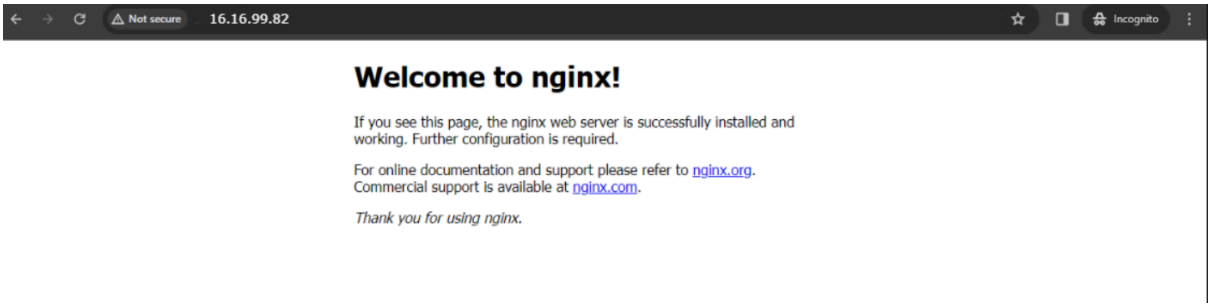
21. Select the instance ID of the newly created instance.



22.Copy the **Public IPv4 address.**



23. Paste the address into a new tab in your browser. The window should display "**Welcome to nginx server**".



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.