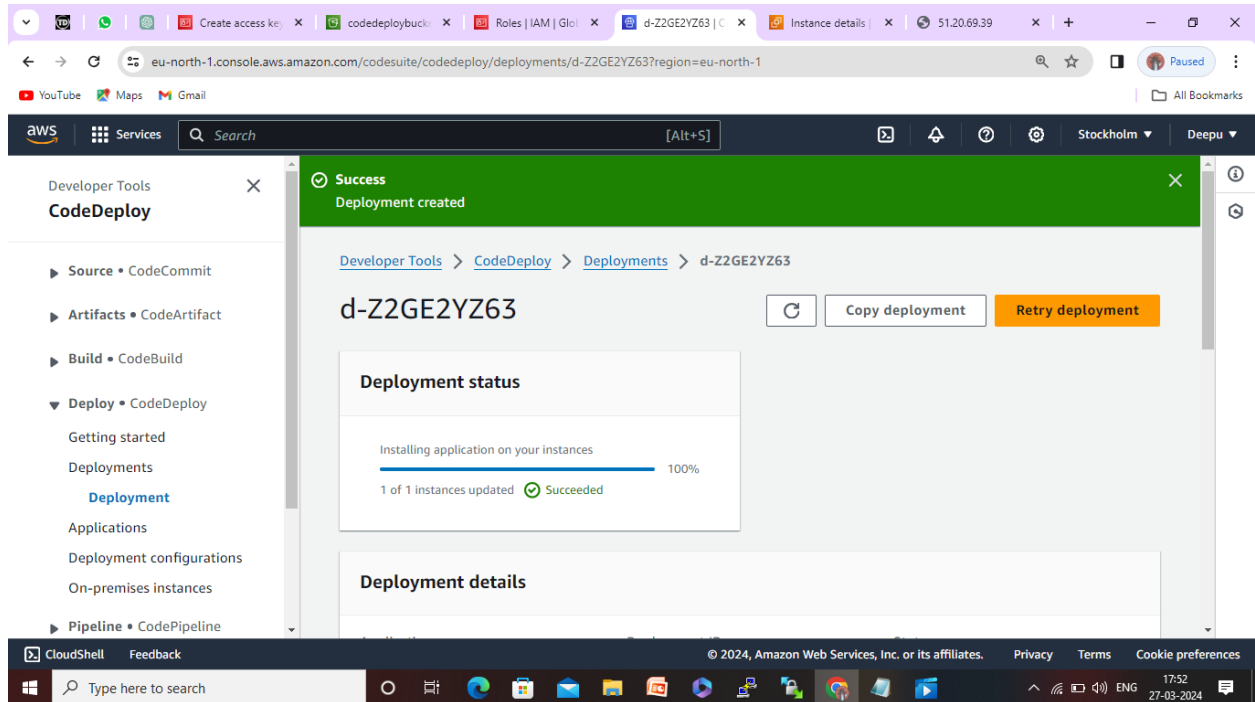
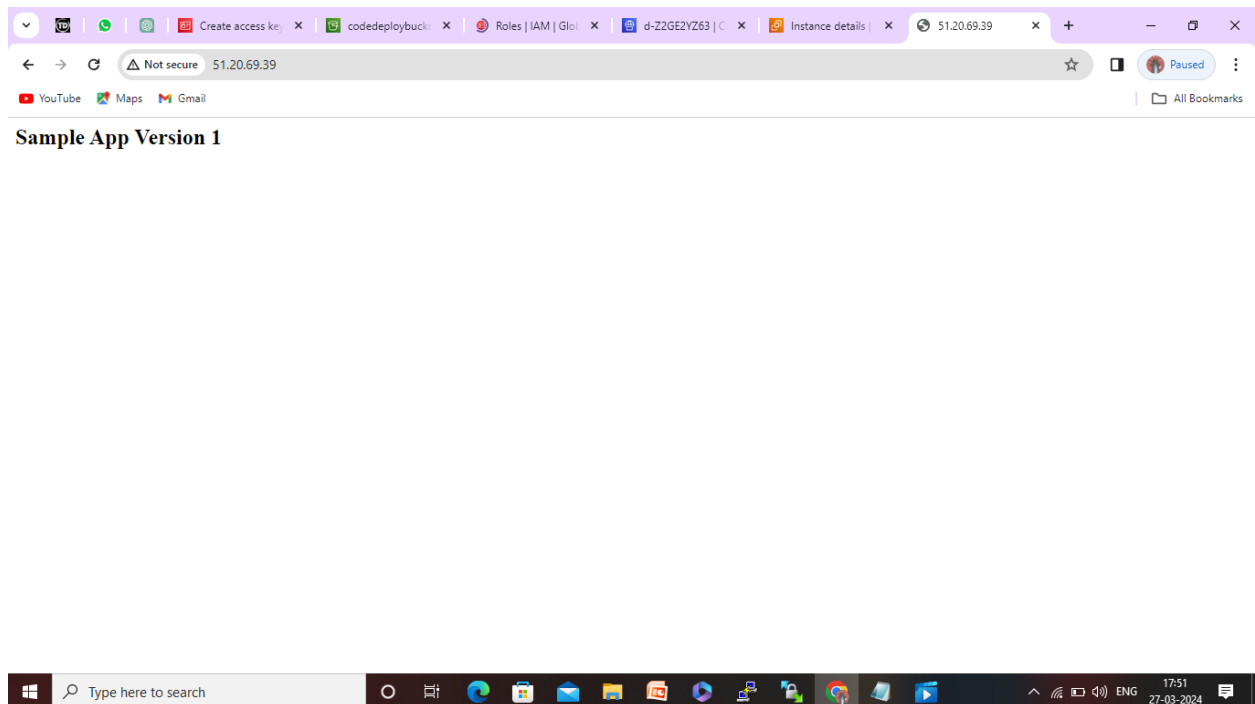


Creating a SNS notification for CD-CP deployment

Manual deployment done using code deploy.



Viewing the code deployment output through the web browser.



Creating a Code pipeline for automate the process of deployment.

The screenshot shows the AWS CodePipeline console in the 'eu-north-1' region. The breadcrumb navigation is 'Developer Tools > CodePipeline > Pipelines > Create new pipeline'. The left sidebar lists the steps: Step 1: Choose pipeline settings (active), Step 2: Add source stage, Step 3: Add build stage, Step 4: Add deploy stage, and Step 5: Review. The main content area is titled 'Choose pipeline settings' with a subtitle 'Step 1 of 5'. Below this is a 'Pipeline settings' section. It includes a 'Pipeline name' field with the value 'mypipeline' and a note 'No more than 100 characters'. The 'Pipeline type' section has two options: 'V1' and 'V2', with 'V2' selected. Below this is the 'Execution mode' section, which is currently collapsed. The bottom of the screen shows the Windows taskbar with the time 17:54 on 27-03-2024.

Step 1
Choose pipeline settings

Step 2
Add source stage

Step 3
Add build stage

Step 4
Add deploy stage

Step 5
Review

Choose pipeline settings

Step 1 of 5

Pipeline settings

Pipeline name
Enter the pipeline name. You cannot edit the pipeline name after it is created.

mypipeline

No more than 100 characters

Pipeline type
The pipeline type determines the pipeline structure and availability of parameters such as triggers. Pipeline type selection will impact features and pricing. [Which pipeline is right for me?](#)

☐ V1 ☒ V2

Execution mode
Choose the execution mode for your pipeline. This determines how the pipeline is run.

This screenshot shows the 'Execution mode' section of the 'Choose pipeline settings' step. It contains three radio button options: 'Superseded' (A more recent execution can overtake an older one. This is the default.), 'Queued (Pipeline type V2 required)' (Executions are processed one by one in the order that they are queued.), and 'Parallel (Pipeline type V2 required)' (Executions don't wait for other runs to complete before starting or finishing.). The 'Queued' option is selected. Below this is the 'Service role' section with two options: 'New service role' (Create a service role in your account) and 'Existing service role' (Choose an existing service role from your account). The 'New service role' option is selected. Below this is the 'Role name' field with the value 'AWSCodePipelineServiceRole-eu-north-1-mypipeline'. There is a checkbox labeled 'Allow AWS CodePipeline to create a service role so it can be used with this new pipeline' which is checked. The bottom of the screen shows the Windows taskbar with the time 17:57 on 27-03-2024.

Choose the execution mode for your pipeline. This determines how the pipeline is run.

☐ Superseded
A more recent execution can overtake an older one. This is the default.

☒ Queued (Pipeline type V2 required)
Executions are processed one by one in the order that they are queued.

☐ Parallel (Pipeline type V2 required)
Executions don't wait for other runs to complete before starting or finishing.

Service role

☒ New service role
Create a service role in your account

☐ Existing service role
Choose an existing service role from your account

Role name

AWSCodePipelineServiceRole-eu-north-1-mypipeline

Type your service role name

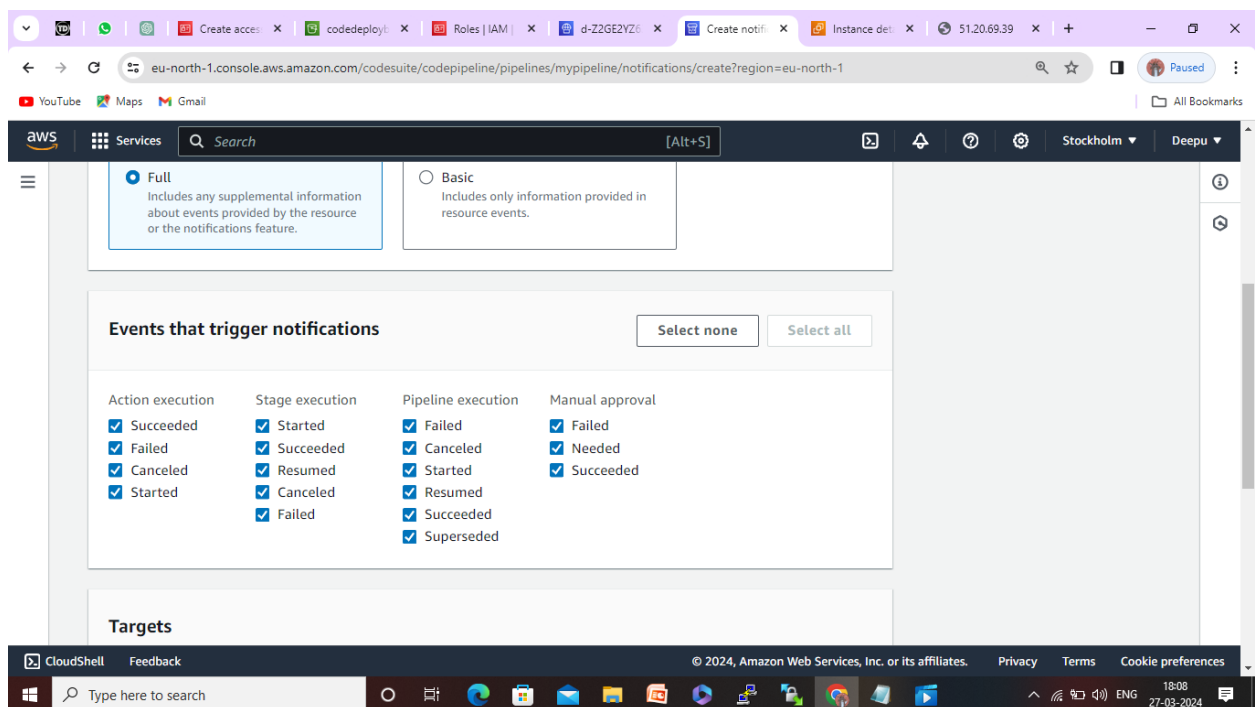
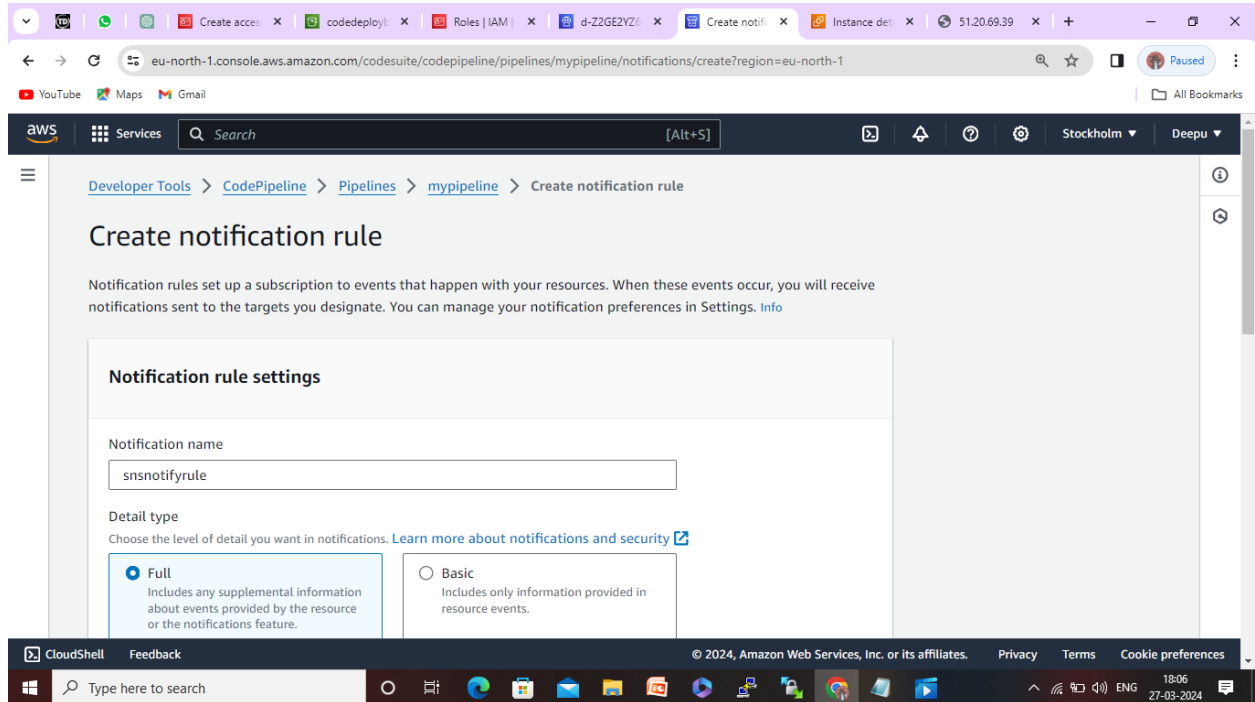
☒ Allow AWS CodePipeline to create a service role so it can be used with this new pipeline

Pipeline has been created and successfully deployed.

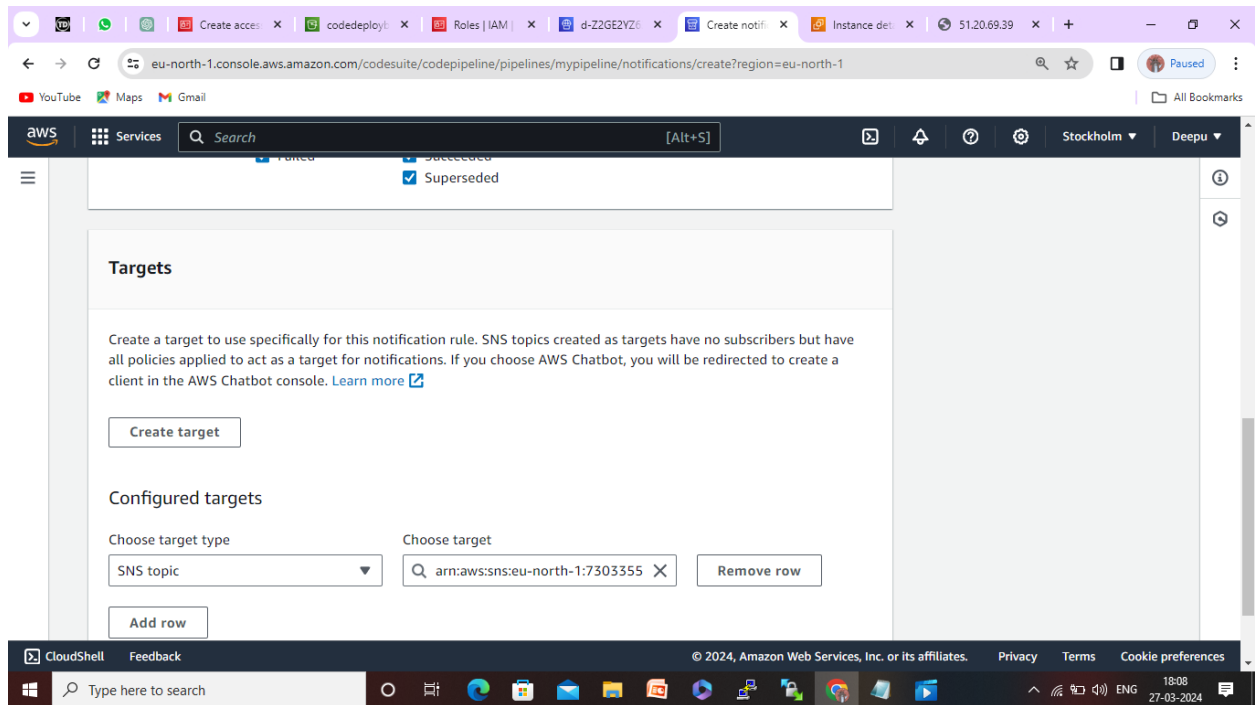
The screenshot shows the AWS CodePipeline console for a pipeline named 'mypipeline'. The pipeline type is V2 and the execution mode is QUEUED. The 'Source' stage is shown as 'Succeeded' with a green checkmark. The pipeline execution ID is 2a6236b4-0fd3-4f55-98e4-280d1f678c49. The source is Amazon S3 version id: ViMLbpTXgp1aAL56Fz_Cifvmx6ud2mtl. The console also shows a 'Release change' button and a 'View details' button for the source stage.

The screenshot shows the AWS CodePipeline console for the same pipeline 'mypipeline'. The 'Deploy' stage is now shown as 'Succeeded' with a green checkmark. The pipeline execution ID remains 2a6236b4-0fd3-4f55-98e4-280d1f678c49. The source is still Amazon S3 version id: ViMLbpTXgp1aAL56Fz_Cifvmx6ud2mtl. A 'Disable transition' button is visible above the 'Deploy' stage. The console also shows a 'View details' button for the deploy stage.

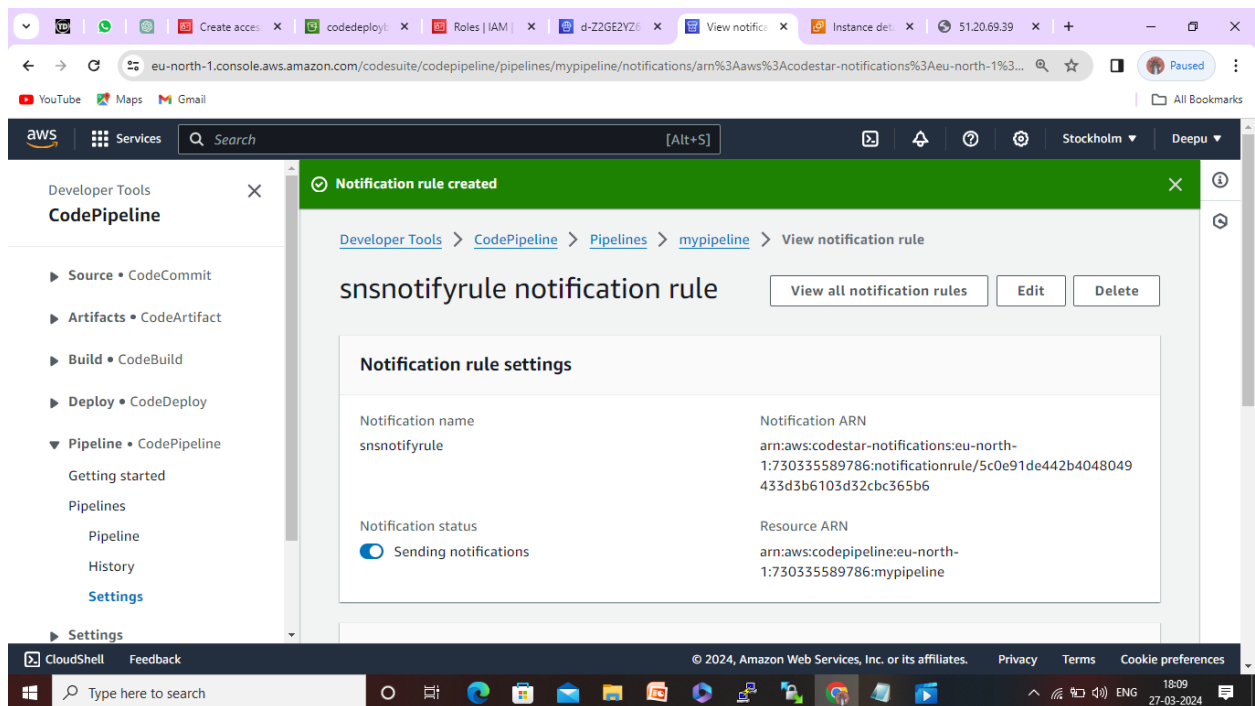
Creating a SNS notification for notify the user for any changes and updation in the code level and deployment of code in the code pipeline.



Setting the target as SNS .



And the notification rule has been created.



Creating subscription for that sns notification rule by choosing email as the protocol.

eu-north-1.console.aws.amazon.com/sns/v3/home?region=eu-north-1#/create-subscription

Create subscription

Details

Topic ARN
arn:aws:sns:eu-north-1:730335589786:codestar-notifications-

Protocol
The type of endpoint to subscribe
Email

Endpoint
An email address that can receive notifications from Amazon SNS.
vdeeps2k@gmail.com

After your subscription is created, you must confirm it. [Info](#)

eu-north-1.console.aws.amazon.com/sns/v3/home?region=eu-north-1#/subscription/arn:aws:sns:eu-north-1:730335589786:codestar-notifications-:8ad8d347-332a-4ce8-bd2d-bed80bddbd05

Subscription: 8ad8d347-332a-4ce8-bd2d-bed80bddbd05

[Edit](#) [Delete](#)

Details

| | |
|---|--------------------------------|
| ARN arn:aws:sns:eu-north-1:730335589786:codestar-notifications-:8ad8d347-332a-4ce8-bd2d-bed80bddbd05 | Status Pending confirmation |
| Endpoint vdeeps2k@gmail.com | Protocol EMAIL |

Confirming the aws subscription through the given email

The screenshot shows the AWS SNS console for a topic named "arn:aws:sns:eu-north-1:730335589786:codestar-notifications-". The "Subscriptions" tab is selected, showing one subscription in a "Pending confirmation" state. The endpoint is "vdeeps2k@gmail.com" and the protocol is "EMAIL".

Amazon SNS

arn:aws:sns:eu-north-1:730335589786:codestar-notifications-

Type: Standard

Subscriptions (1)

| ID | Endpoint | Status | Protocol |
|----|--------------------|-------------------------|----------|
| | vdeeps2k@gmail.com | Pending confirmation... | EMAIL |

The screenshot shows the same AWS SNS console, but the subscription status has changed to "Confirmed". The ID of the subscription is "8ad8d347-332a-4ce8...".

Amazon SNS

arn:aws:sns:eu-north-1:730335589786:codestar-notifications-

Type: Standard

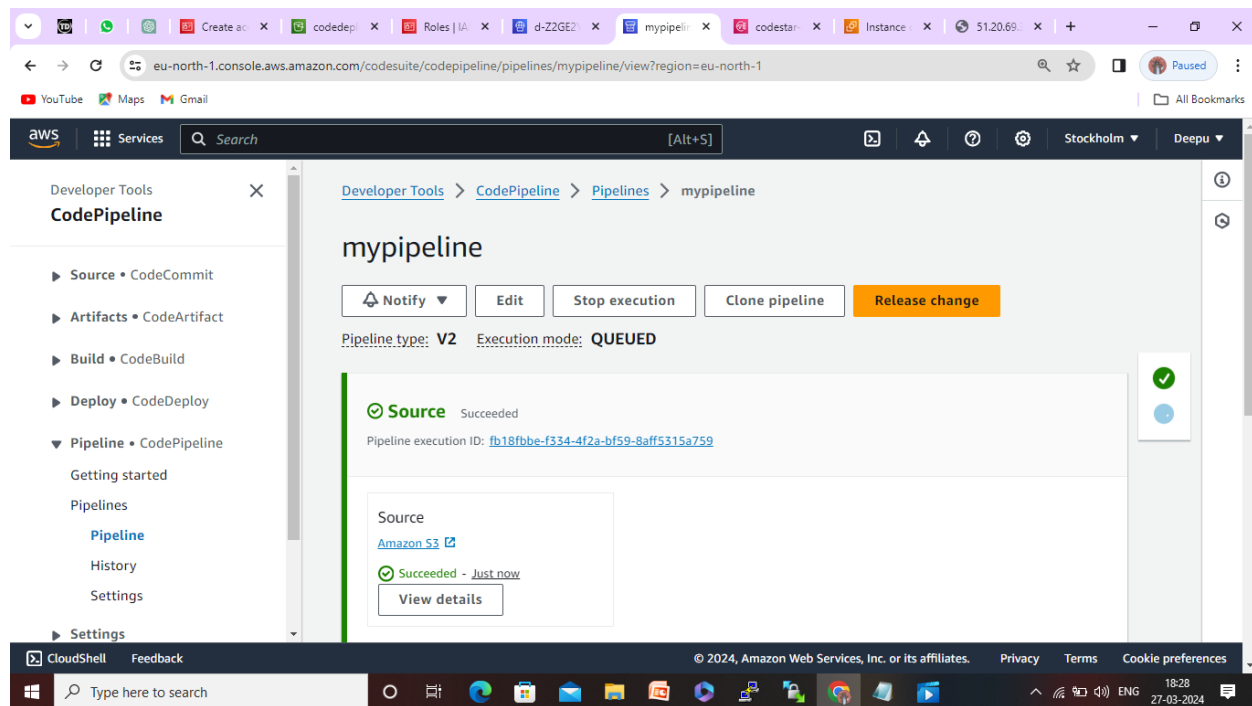
Subscriptions (1)

| ID | Endpoint | Status | Protocol |
|-----------------------|--------------------|-----------|----------|
| 8ad8d347-332a-4ce8... | vdeeps2k@gmail.com | Confirmed | EMAIL |

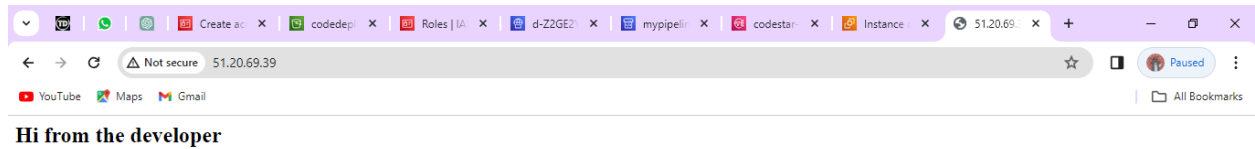
Making some code level change and pushing again them to s3 bucket to make deployment.

```
root@ip-172-31-26-113:~/deploy_dir
[root@ip-172-31-26-113 sampleapp]# ls
appspec.yml  index.html  scripts
[root@ip-172-31-26-113 sampleapp]# aws deploy create-application --application-name sampleapp
{
  "applicationId": "ec5c15ac-8c9f-4a5a-8b78-a1b249524f37"
}
[root@ip-172-31-26-113 sampleapp]# aws deploy push --application-name sampleapp --s3-location s3://codedeploybucket13/sampleapp.zip
To deploy with this revision, run:
aws deploy create-deployment --application-name sampleapp --s3-location bucket=codedeploybucket13,key=sampleapp.zip,bundleType=zip,eTag=20d0f481a564f7bbb960ca0d4c499d3d,version=ViMLbpTXgpiaAL56Fz_CIfvmx6ud2mt1 --deployment-group-name <deployment-group-name> --deployment-config-name <deployment-config-name> --description <description>
[root@ip-172-31-26-113 sampleapp]# ls
appspec.yml  index.html  scripts
[root@ip-172-31-26-113 sampleapp]# nano index.html
[root@ip-172-31-26-113 sampleapp]# zip -r ../sampleapp.zip .
  adding: index.html (deflated 8%)
  adding: scripts/ (stored 0%)
  adding: scripts/httpd_install.sh (stored 0%)
  adding: scripts/httpd_start.sh (deflated 21%)
  adding: scripts/httpd_stop.sh (deflated 21%)
  adding: appspec.yml (deflated 53%)
[root@ip-172-31-26-113 sampleapp]# cd ..
[root@ip-172-31-26-113 deploy_dir]# ll
total 4
drwxr-xr-x 3 root root 58 Mar 27 12:16 sampleapp
-rw-r--r-- 1 root root 1307 Mar 27 12:51 sampleapp.zip
[root@ip-172-31-26-113 deploy_dir]# cp sampleapp.zip s3://codedeploybucket13
cp: cannot create regular file 's3://codedeploybucket13': No such file or directory
[root@ip-172-31-26-113 deploy_dir]# aws s3 cp sampleapp.zip s3://codedeploybucket13
upload: ./sampleapp.zip to s3://codedeploybucket13/sampleapp.zip
[root@ip-172-31-26-113 deploy_dir]#
```

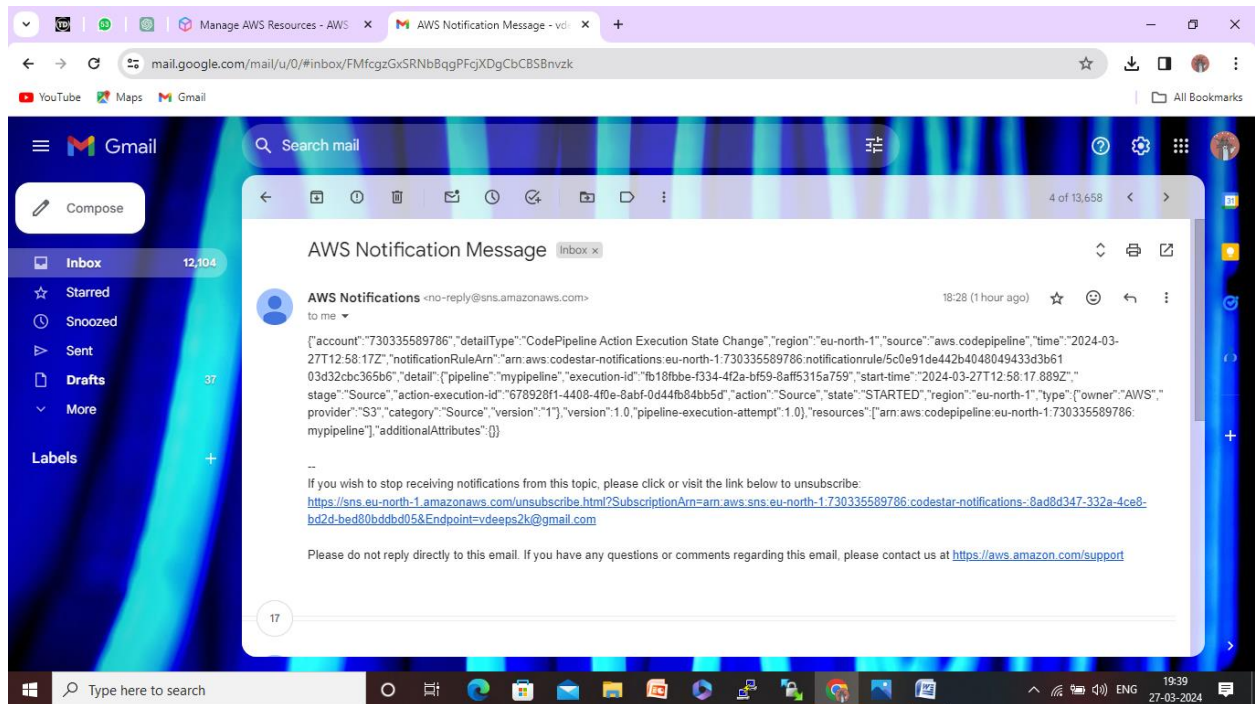
The codepipeline now deploying the code from s3 to web-server.



Now the content of the web-server has been changed to the updated content.



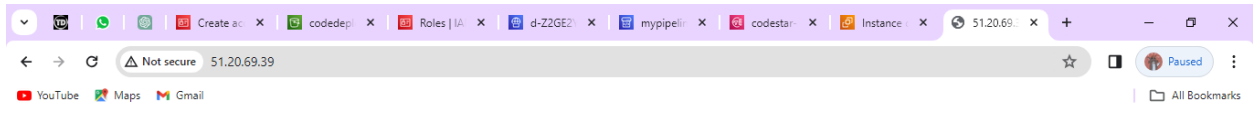
Notification came to the configured email in the SNS rule.



Updating the code again to check the notification.

The screenshot shows the AWS CodePipeline console for a pipeline named 'mypipeline'. The pipeline type is 'V2' and the execution mode is 'QUEUED'. The 'Source' stage is shown as 'Succeeded' with a 'View details' button. The 'Release change' button is highlighted in orange. The left sidebar shows the 'CodePipeline' section with options for Source, Artifacts, Build, Deploy, and Pipeline. The top navigation bar includes 'Developer Tools', 'CodePipeline', and 'Pipelines'.

The screenshot shows the AWS CodePipeline console for the same pipeline 'mypipeline'. The pipeline is still in a 'QUEUED' state. The 'Source' stage is shown as 'Succeeded' with a 'View details' button. The 'Deploy' stage is shown as 'In progress' with a 'View details' button. The 'Disable transition' button is highlighted in orange. The left sidebar shows the 'CodePipeline' section with options for Source, Artifacts, Build, Deploy, and Pipeline. The top navigation bar includes 'Developer Tools', 'CodePipeline', and 'Pipelines'.



Hi from the developer for notificationO

