

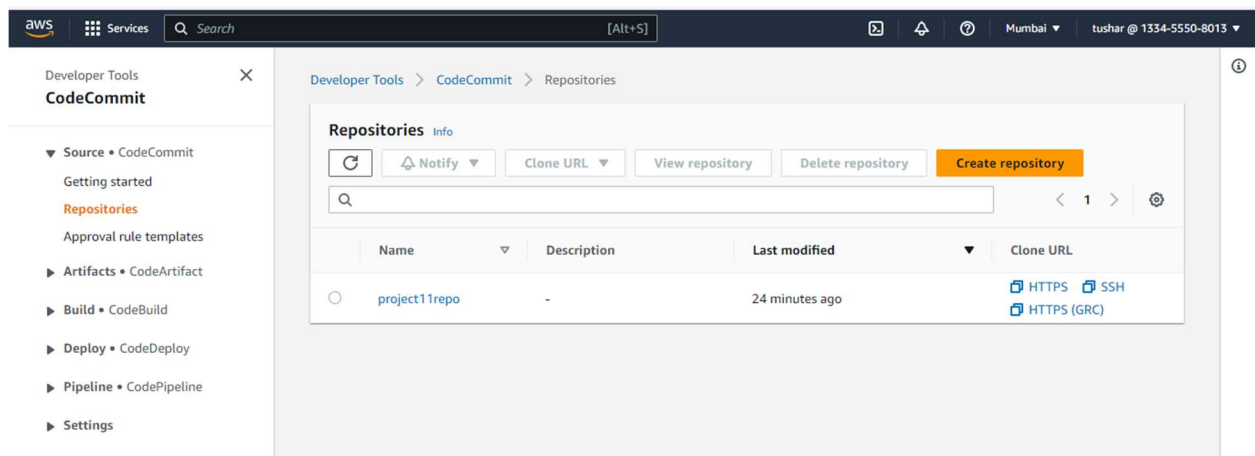
Creating a CI/CD Pipeline to deploy a static website on S3 service with Code pipeline & Code commit

Pre-Requisites:

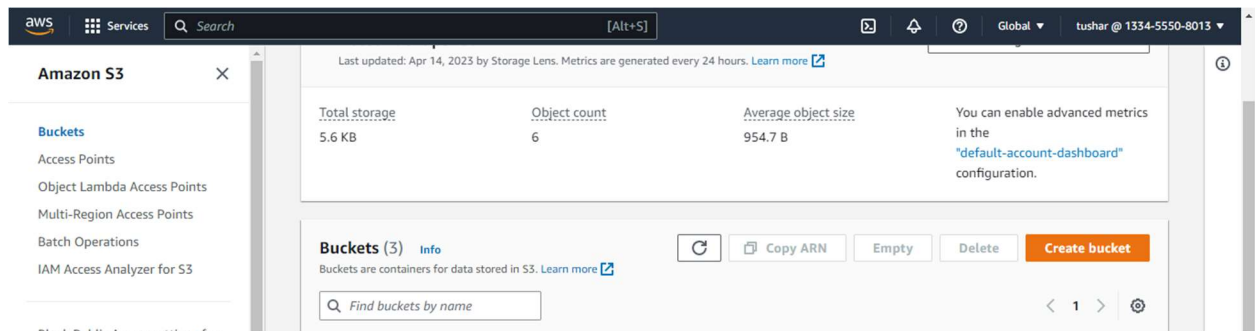
1. User should have required permissions like code commit full access, code pipeline full access, S3 access etc.
2. User should have access keys for “aws configure” & git credentials.

Procedure:

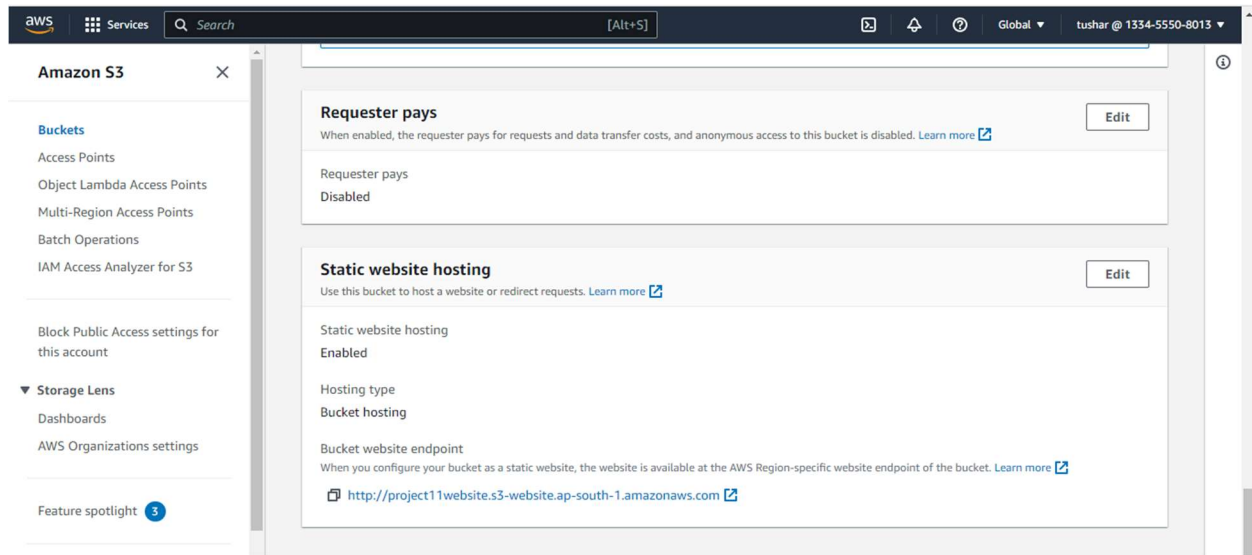
1. Log in to your AWS account, go to code commit & create a repository.



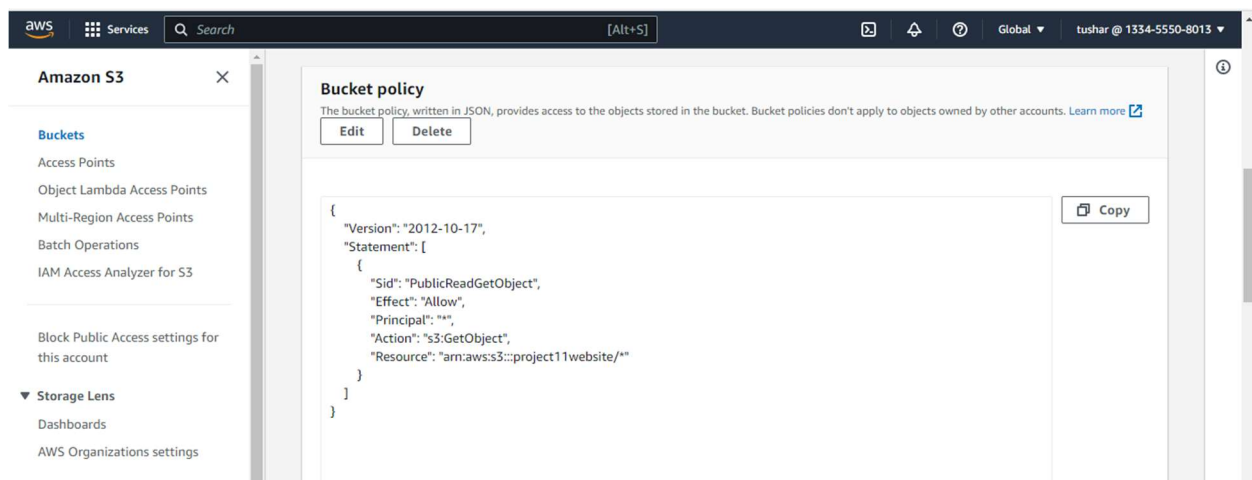
2. After creating repository, go to S3 & create a bucket.



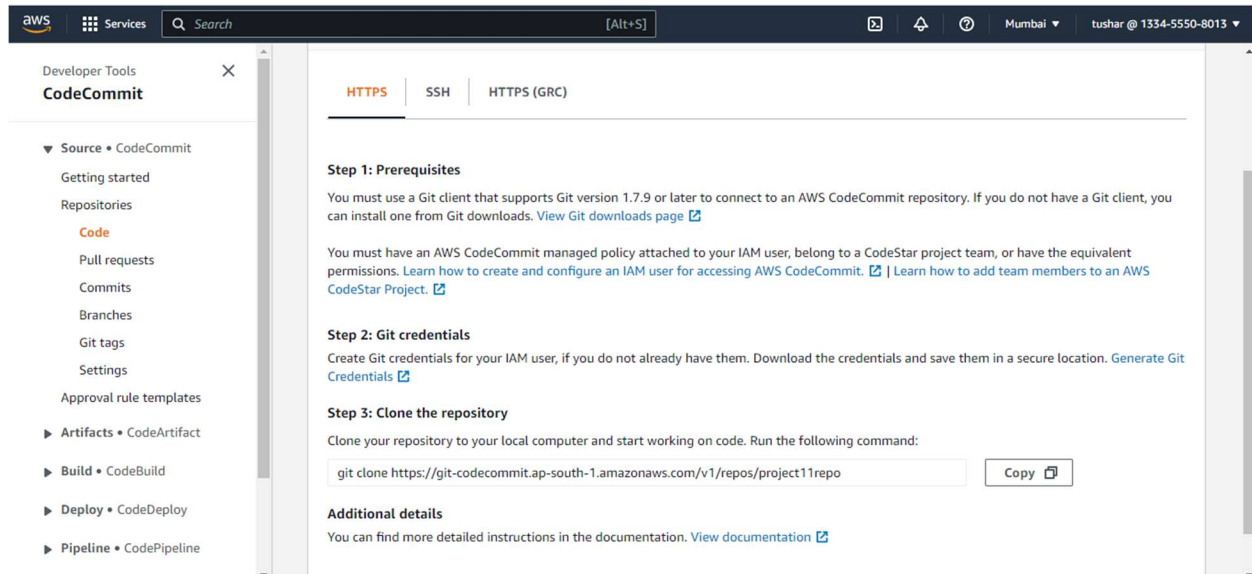
3. After bucket is created, go to properties and enable static website hosting.



4. Create a bucket policy to make your bucket public.



5. Now you bucket is all set up, go to code commit again and copy the command to clone the repo in your local machine.



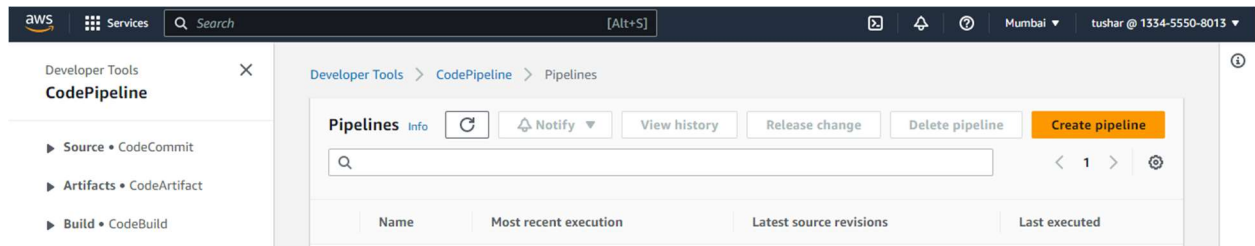
6. Now open your machine terminal, connect to aws account through “aws configure”
7. Use access keys to connect, then paste the command to clone.

```
DELL@DESKTOP-H03T8RE MINGW64 ~/Desktop
$ aws configure
AWS Access Key ID [*****UNHT]: AKIAR6EUROIWZSAZQLFA
AWS Secret Access Key [*****V10f]: nXi4M1aejgrI930X0aajwOHFg1pnQZV5m
r5r9pF
Default region name [ap-south-1]: ap-south-1
Default output format [json]: json

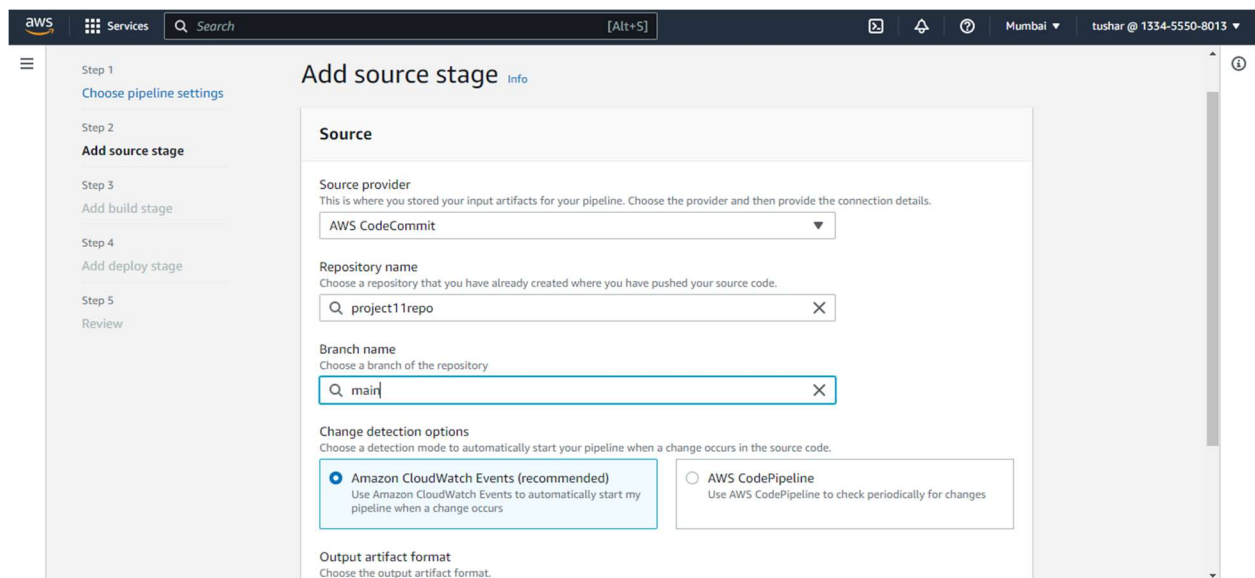
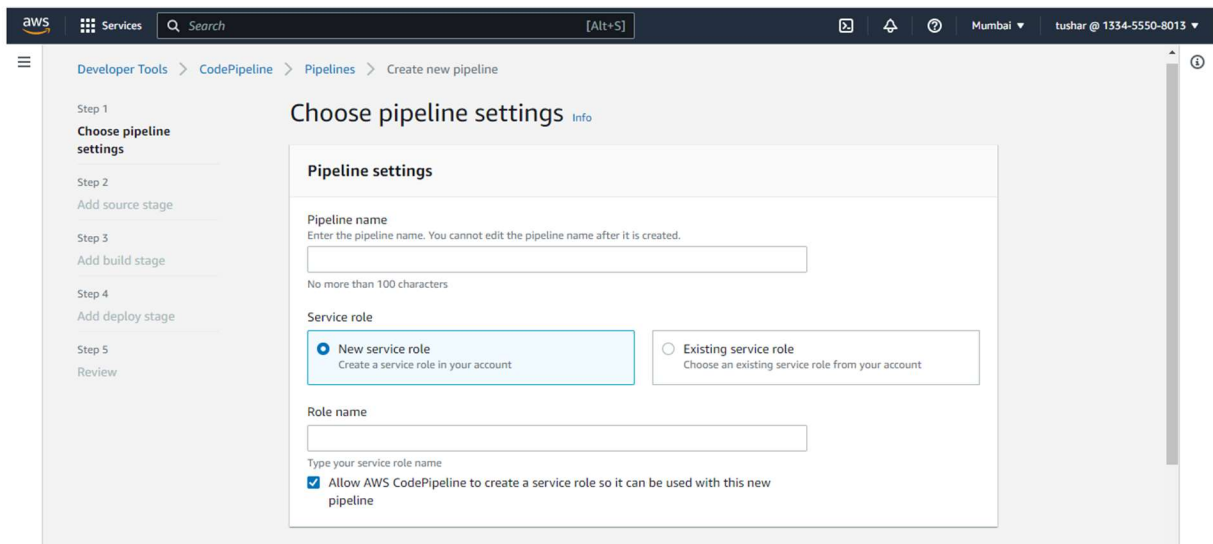
DELL@DESKTOP-H03T8RE MINGW64 ~/Desktop
$ git clone https://git-codecommit.ap-south-1.amazonaws.com/v1/repos/project11repo
Cloning into 'project11repo'...
fatal: unable to access 'https://git-codecommit.ap-south-1.amazonaws.com/v1/repos/project11repo/': The requested URL returned error: 403

DELL@DESKTOP-H03T8RE MINGW64 ~/Desktop
$ aws codecommit list-repositories
{
  "repositories": [
    {
      "repositoryName": "project11repo",
      "repositoryId": "859fa076-c6f7-4d50-9eca-3aeb109950eb"
    }
  ]
}
```

8. Now create pipeline as we have maintained S3 bucket & repo in code commit.



9. Now configure the steps like add source and destination.



The screenshot shows the AWS CodePipeline console interface. On the left, a sidebar lists the steps: Step 3 (Add build stage), Step 4 (Add deploy stage), Step 5, and Review. The main area is titled 'Deploy' and contains the following configuration options:

- Deploy provider:** Amazon S3 (selected from a dropdown menu).
- Region:** Asia Pacific (Mumbai) (selected from a dropdown menu).
- Bucket:** project11website (entered in a text field).
- Deployment path - optional:** (empty text field).
- Extract file before deploy:** ☒ (checked).
- Additional configuration:** (expandable section).

At the bottom right, there are three buttons: 'Cancel', 'Previous', and 'Next'.

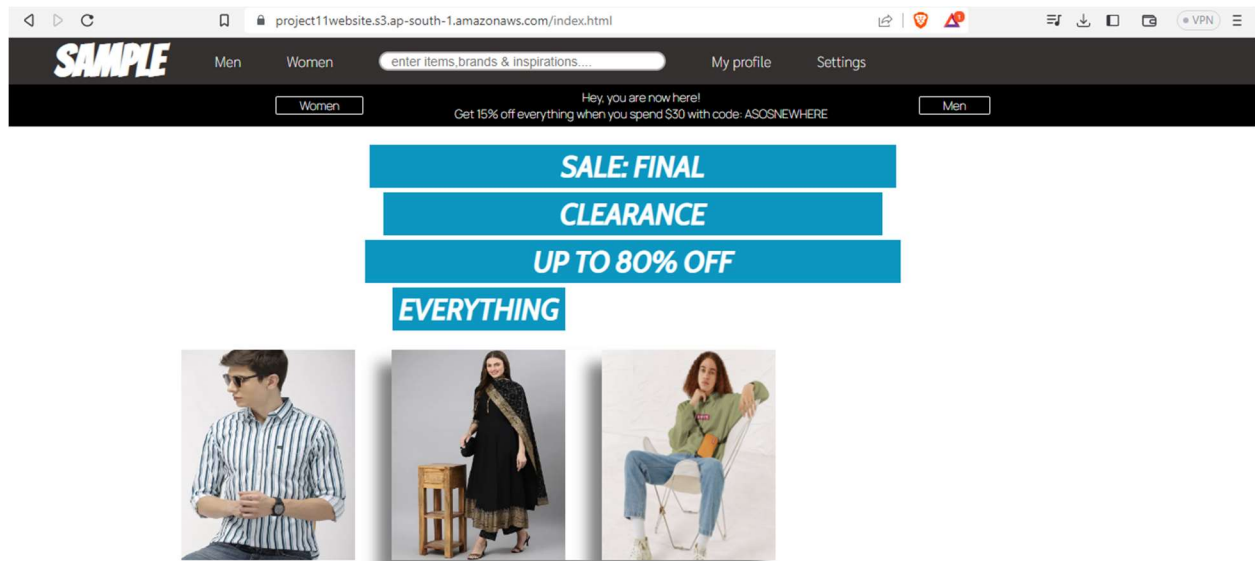
10. After configuring your pipeline is established.

The screenshot shows the AWS CodePipeline console interface for a pipeline named 's3-bucket'. The top navigation bar includes 'Developer Tools > CodePipeline > Pipelines > s3-bucket'. The main area displays the pipeline execution details:

- Source:** Succeeded. Pipeline execution ID: fc1eebe0-461a-4dba-b3ac-df610d7863ad.
- Source:** AWS CodeCommit. Succeeded - 29 minutes ago. 8e8783a0.
- Deploy:** Succeeded. Pipeline execution ID: fc1eebe0-461a-4dba-b3ac-df610d7863ad.

A 'Disable transition' button is visible between the Source and Deploy stages. On the right side, there are two green checkmarks indicating successful execution.

11. Let check the output.



12. Now we have changed the “\$30” to “\$300” in index.html file, let see if changes take place.

```
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 2.27 KiB | 773.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote: Validating objects: 100%
To https://git-codecommit.ap-south-1.amazonaws.com/v1/repos/project11repo
   cbf8d4b..8e8783a  main -> main

DELL@DESKTOP-H03T8RE MINGW64 ~/Desktop/project11repo (main)
$ vi index.html

DELL@DESKTOP-H03T8RE MINGW64 ~/Desktop/project11repo (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

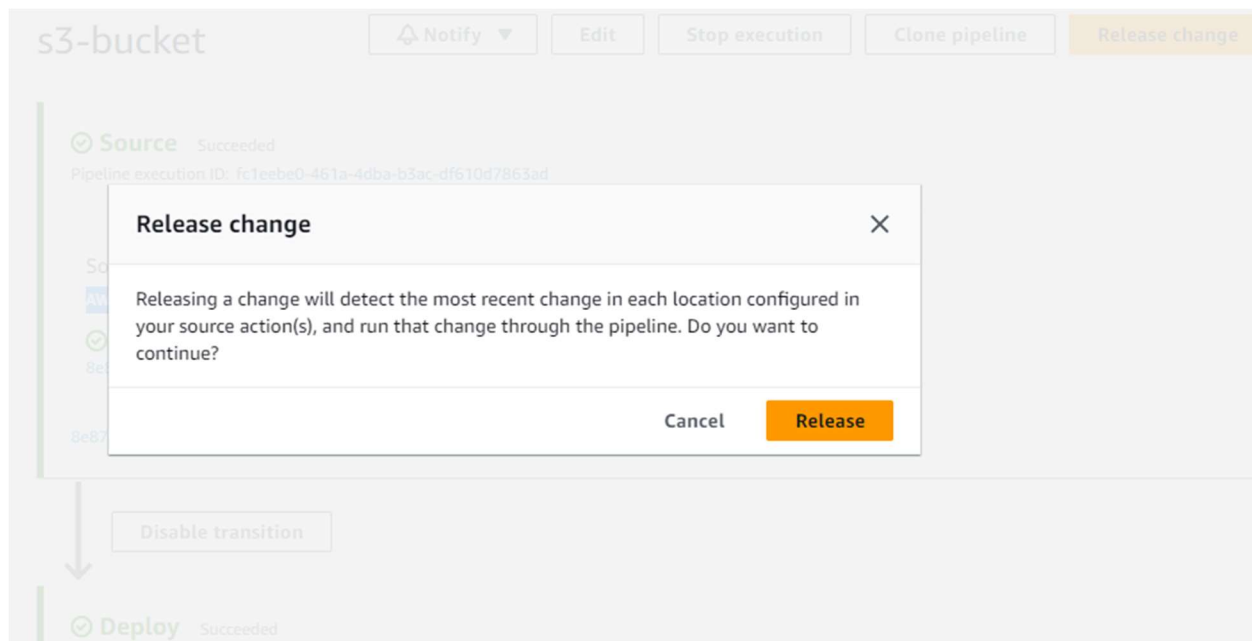
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   index.html

no changes added to commit (use "git add" and/or "git commit -a")

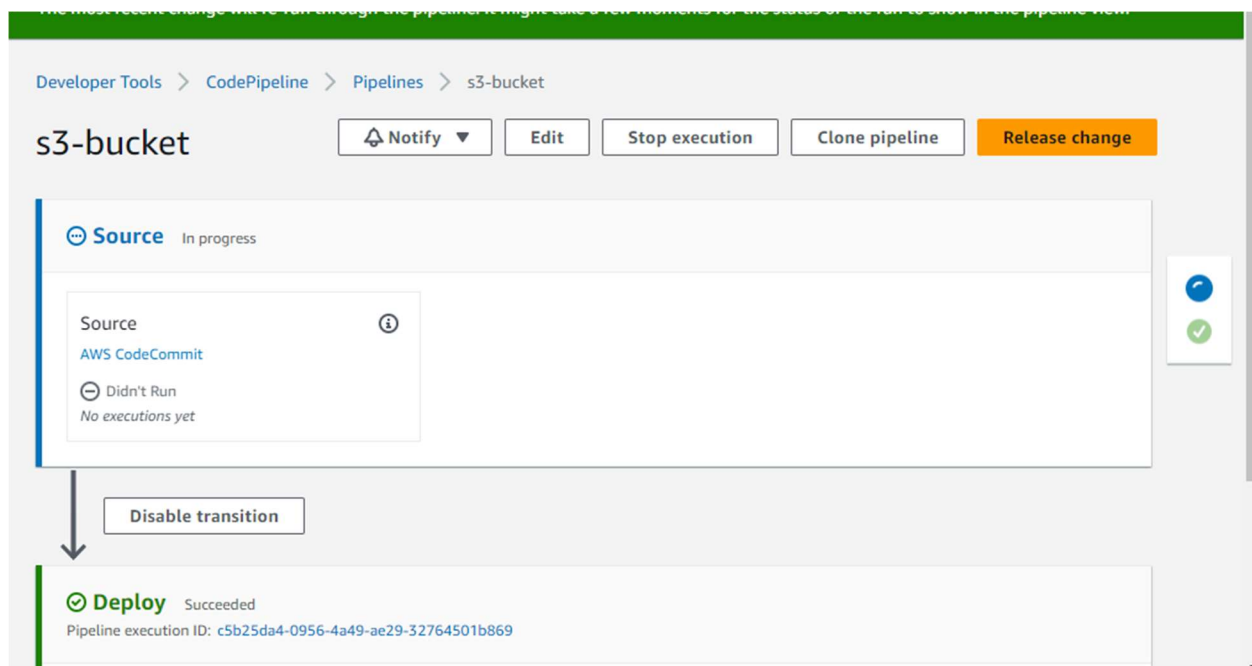
DELL@DESKTOP-H03T8RE MINGW64 ~/Desktop/project11repo (main)
$ |
```

13. Push the new file to remote repo.

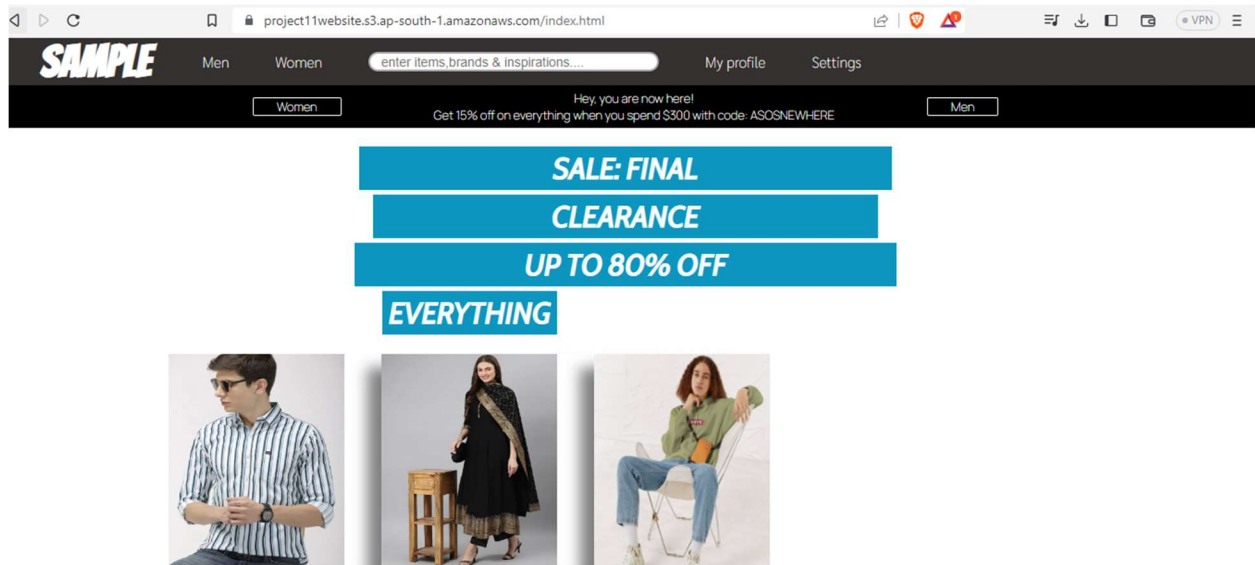
14. Click on release & release changes.



15. Your pipeline will start the process.



16. Now, let's check the output.



Note:- To make bucket public, policy you can find in the attached github link.

<https://github.com/TusharChauhan771/CI-CD-pipeline-with-S3bucket.git>