

## Question 2

Step 1 :

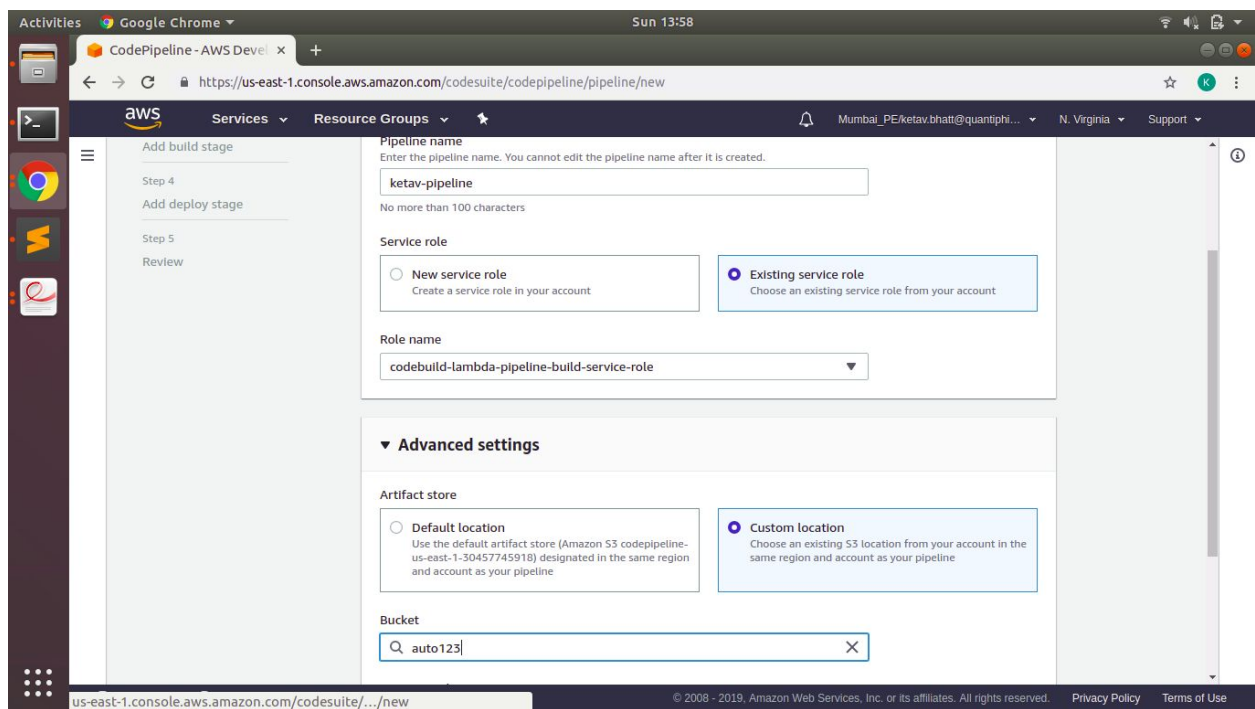
Navigate to CodePipeline console in dashboard

Step 2 :

In pipeline, Create new Pipeline and assign a name

In Service Role , select Existing Service Role as  
codebuild-lambda-pipeline-build-service-role

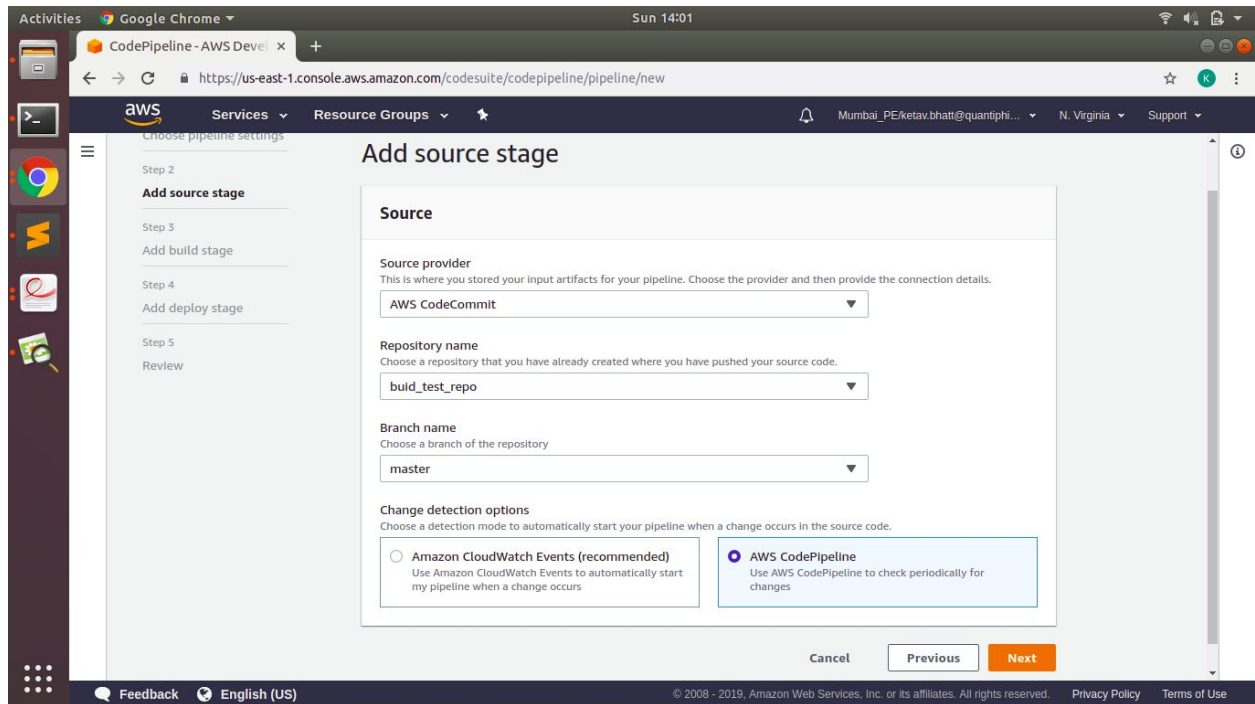
In Advanced Settings select default or custom location for the artifacts storage and leave  
encryption key as default



Step 3 :

In Source Stage add Source Provider as AWS CodeCommit and select the repository  
name and branch where cft file and lambda file are being commit

In Change Detection options select Amazon CloudWatch to detect changes in Source  
Click Next to add next Stage



#### Step 4:

In Build Stage select Build Provider as AWS CodeBuild.

Create project for CodeBuild

In CodeBuild, assign project name and tags

In Environment Images , select Managed Image and choose OS as ubuntu.

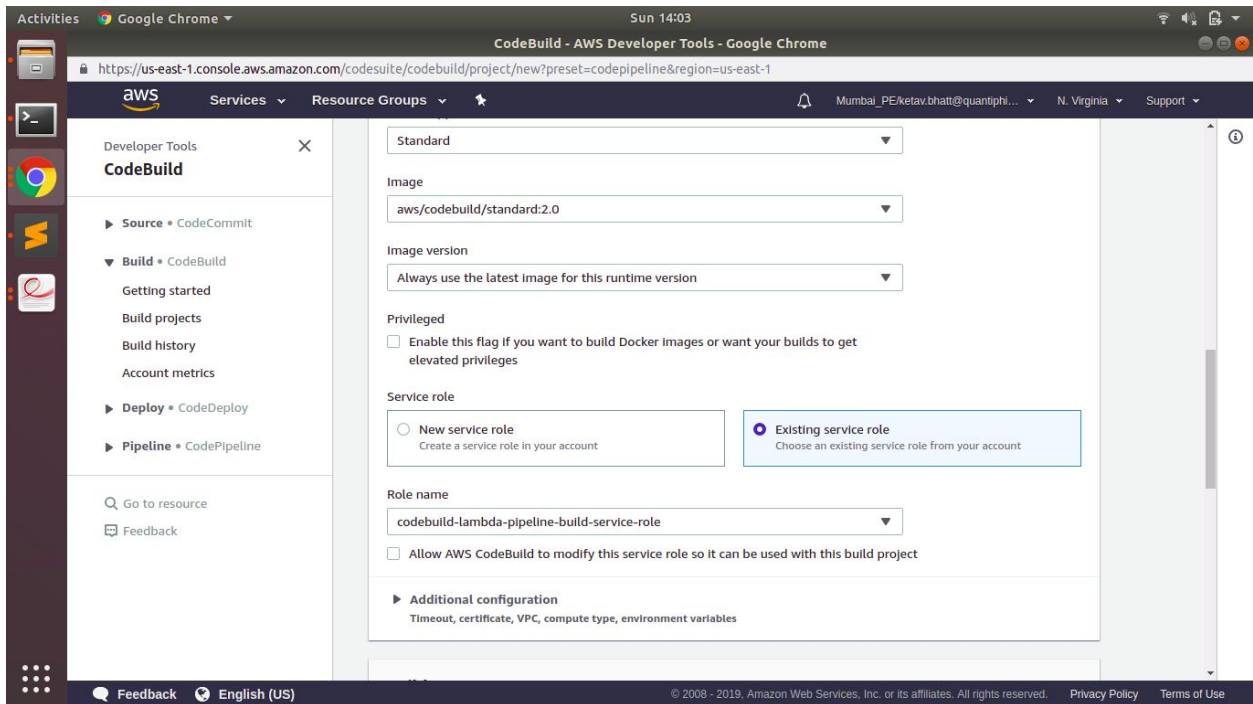
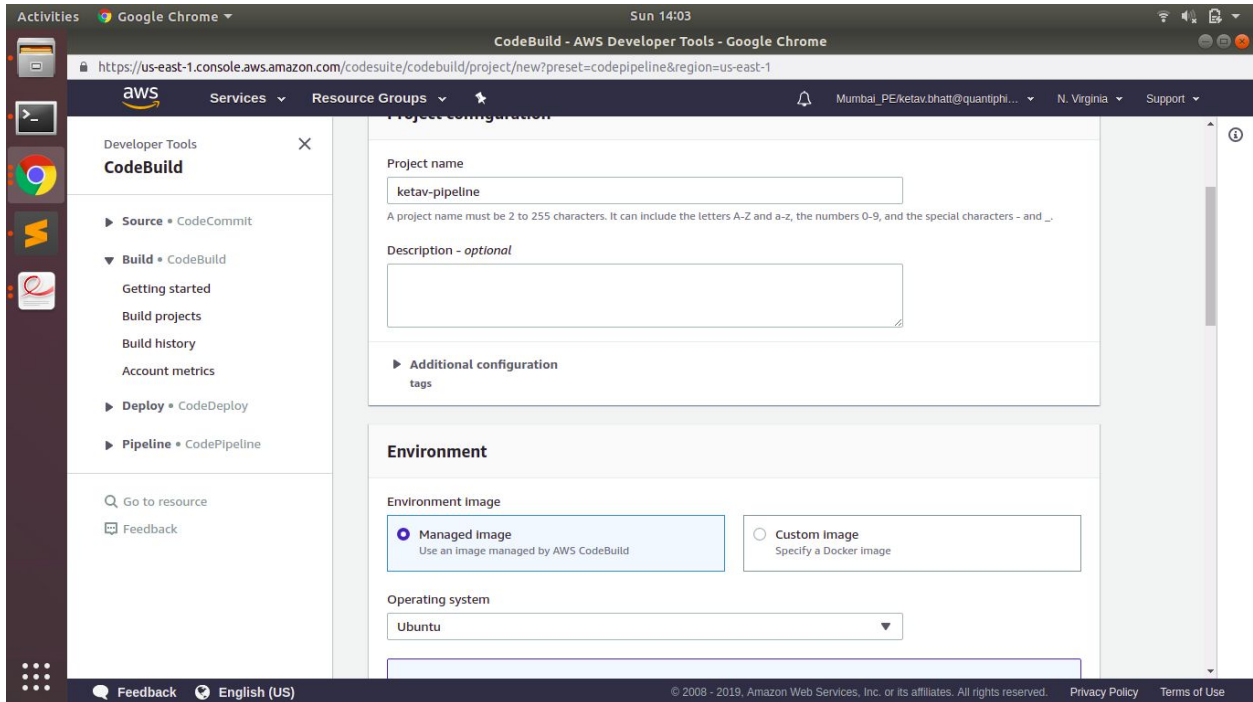
Select Runtime as standard and image as aws/codebuild/standard2.0

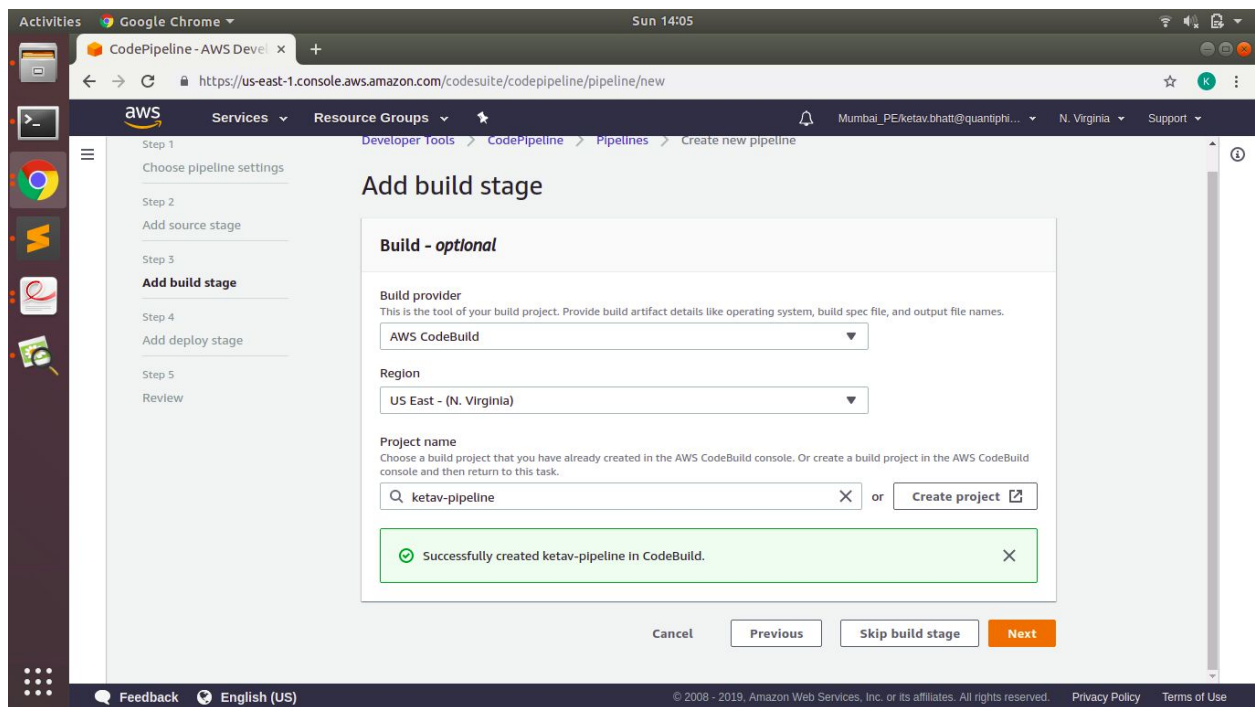
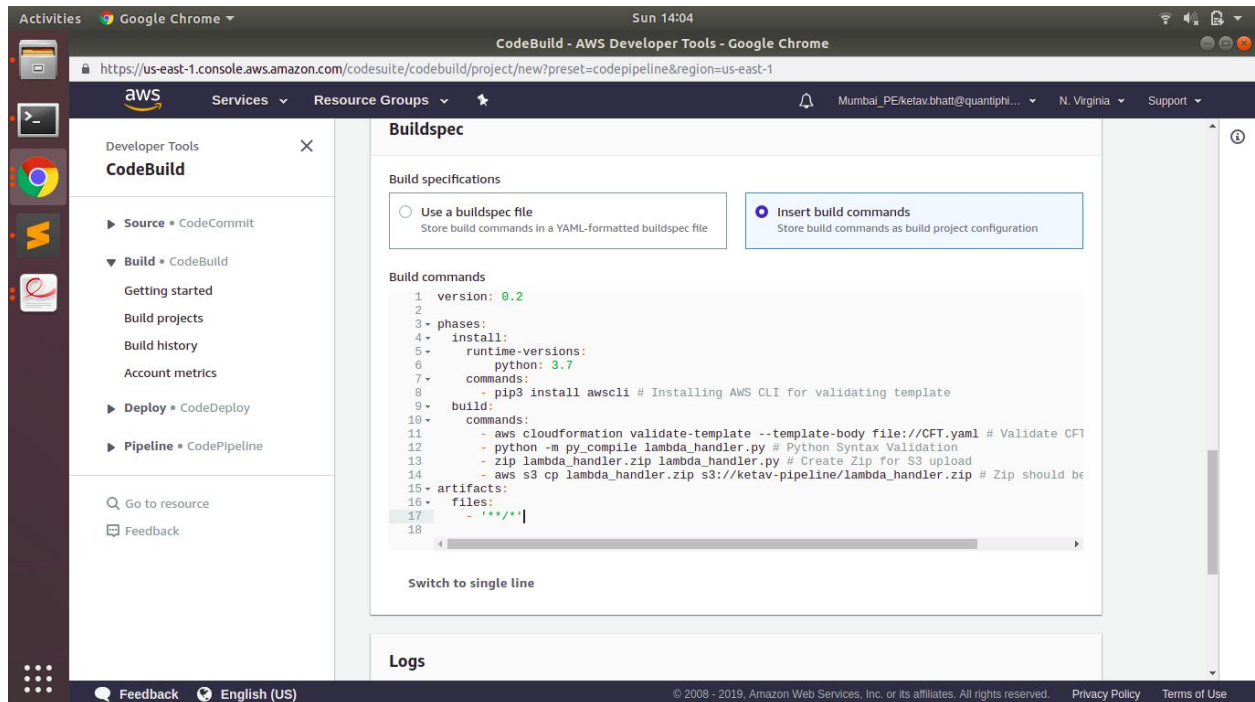
In Service Role select existing service role as  
codebuild-lambda-pipeline-build-service-role

Now in buildspec section , Select insert build command and click on Switch to editor and  
insert the buildspec code as given in buildspec.yaml

Now click on continue to codepipeline

Click on Next to Add the Build stage for Testing





Step 5 :

Now in Deploy Stage Select Deploy Provider as AWS CloudFormation.

Select Action Mode as "Create or Update Stack"

Give a Stack Name (do not select an existing one)

In Template give your template path as "BuildArtifact::cft.yaml"

Select Role as codebuild-lambda-pipeline-build-service-role

Provide Output file name as DeployArtifact

Now click on Next and Review and Create the pipeline

Once created, the pipeline will auto execute and the stages will be executed and Deployed.

The screenshot shows the AWS CodePipeline console in Google Chrome. The browser address bar displays the URL: <https://us-east-1.console.aws.amazon.com/codesuite/codepipeline/pipeline/new>. The page title is "CodePipeline - AWS DevOps". The main content area is titled "Create or update a stack" and contains the following fields:

- Stack name:** A text input field with the value "testAutomation".
- Template:** A text input field with the value "SourceArtifact::cft.yaml". Below it, the text "<InputArtifactName>::<TemplateFileName>" is displayed.
- Template configuration - optional:** A text input field for the configuration file name. Below it, the text "<InputArtifactName>::<TemplateConfigurationFileName>" is displayed.
- Capabilities - optional:** A dropdown menu for specifying whether to allow AWS CloudFormation to create IAM resources on your behalf.
- Role name:** A dropdown menu with the value "codebuild-lambda-pipeline-build-service-role".
- Output file name:** A text input field with the value "OutputArtifact".

At the bottom of the form, there is a link "File generated by this action". The footer of the page includes "Feedback", "English (US)", and copyright information: "© 2008 - 2019, Amazon Web Services, Inc. or its affiliates. All rights reserved. Privacy Policy Terms of Use".