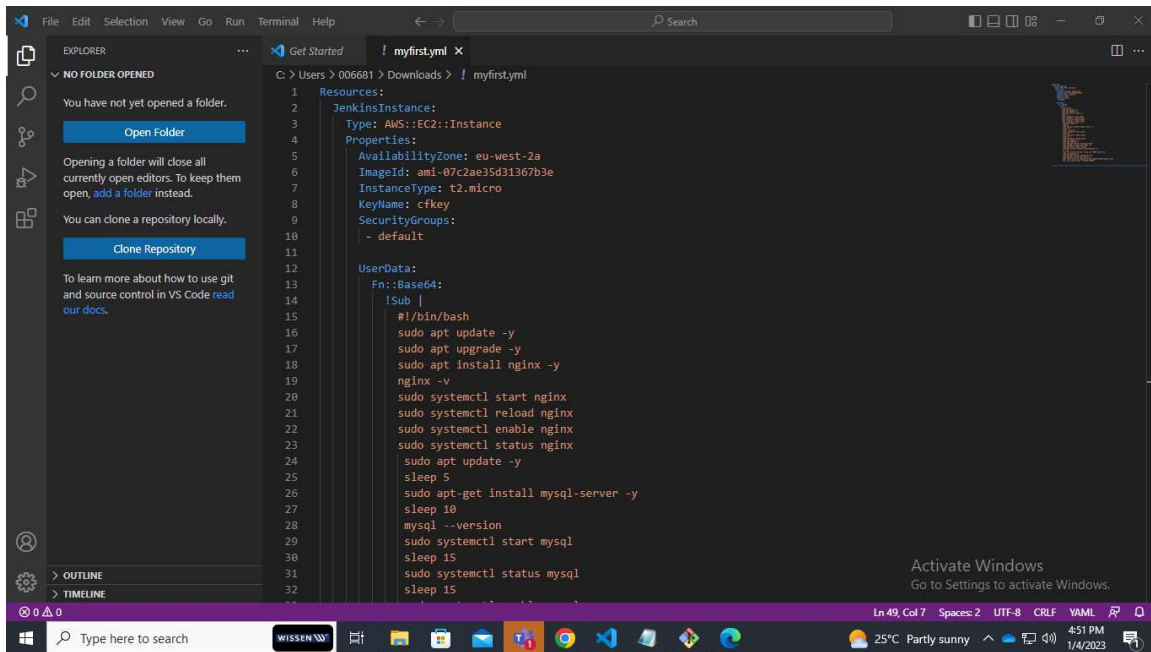


Implementation of Multiple Packages through cloudformation :

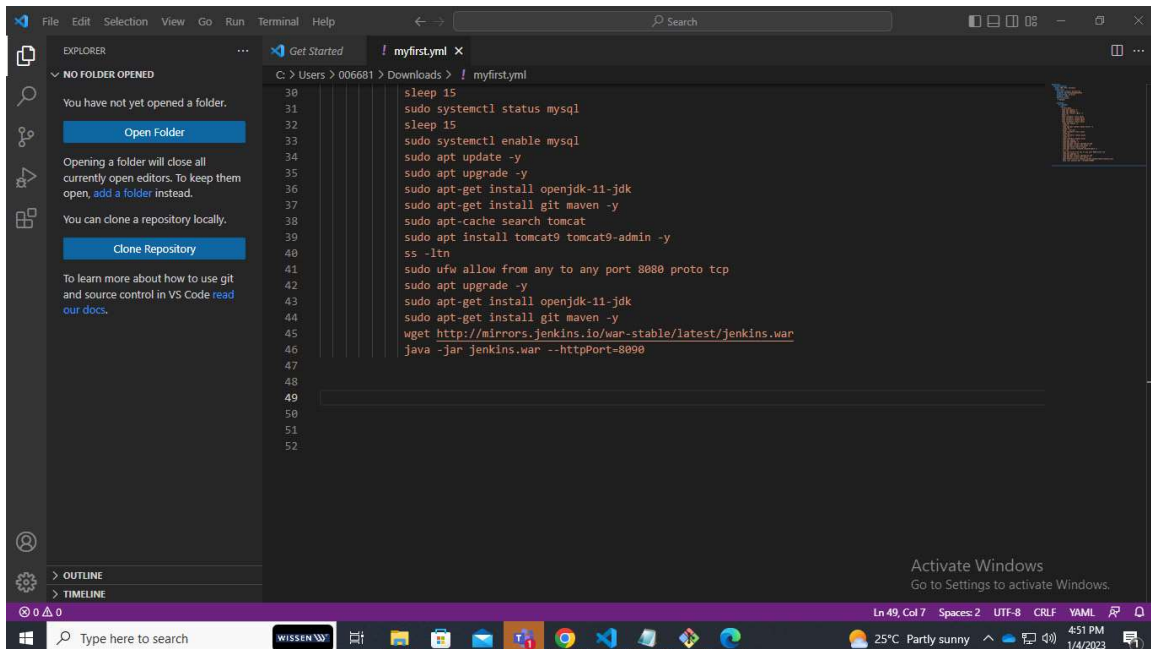


The screenshot shows the Visual Studio Code interface with a CloudFormation template named 'myfirst.yml' open in the editor. The template defines an AWS EC2 instance named 'JenkinsInstance' with the following properties:

```
Resources:
  JenkinsInstance:
    Type: AWS::EC2::Instance
    Properties:
      AvailabilityZone: eu-west-2a
      ImageId: ami-07c2ae35d31367b3e
      InstanceType: t2.micro
      KeyName: cfkey
      SecurityGroups:
        - default

UserData:
  Fn::Base64:
    !Sub |
      #!/bin/bash
      sudo apt update -y
      sudo apt upgrade -y
      sudo apt install nginx -y
      nginx -v
      sudo systemctl start nginx
      sudo systemctl reload nginx
      sudo systemctl enable nginx
      sudo systemctl status nginx
      sudo apt update -y
      sleep 5
      sudo apt-get install mysql-server -y
      sleep 10
      mysql --version
      sudo systemctl start mysql
      sleep 15
      sudo systemctl status mysql
      sleep 15
```

The status bar at the bottom indicates the cursor is at line 49, column 7, with 2 spaces, in UTF-8 encoding, CRLF line endings, and YAML syntax. The system tray shows the date and time as 4:51 PM on 1/4/2023.



The screenshot shows the continuation of the CloudFormation template 'myfirst.yml' in the Visual Studio Code editor. The template continues with the following properties:

```
      sleep 15
      sudo systemctl status mysql
      sleep 15
      sudo systemctl enable mysql
      sudo apt update -y
      sudo apt upgrade -y
      sudo apt-get install openjdk-11-jdk
      sudo apt-get install git maven -y
      sudo apt-cache search tomcat
      sudo apt install tomcat9 tomcat9-admin -y
      ss -ltn
      sudo ufw allow from any to any port 8888 proto tcp
      sudo apt upgrade -y
      sudo apt-get install openjdk-11-jdk
      sudo apt-get install git maven -y
      wget http://mirrors.jenkins.io/war-stable/latest/jenkins.war
      java -jar jenkins.war --httpPort=8890
```

The status bar at the bottom indicates the cursor is at line 49, column 7, with 2 spaces, in UTF-8 encoding, CRLF line endings, and YAML syntax. The system tray shows the date and time as 4:51 PM on 1/4/2023.

- Open the cloudformation service upload the file
- Create a stack using YAML code

The first screenshot shows the AWS CloudFormation console. In the left-hand 'Stacks' list, the 'cfstack' stack is highlighted with a red box. It shows a status of 'CREATE_COMPLETE' and a creation time of '2023-01-04 17:05:02 UTC+0530'. The right-hand pane shows the 'Stack info' tab for 'cfstack', also with a red box. It displays the stack ID 'arn:aws:cloudformation:eu-west-2:904187477651:stack/cfstack/d3ed4640-8c23-11ed-93cf-06dd71a1a050' and confirms the status is 'CREATE_COMPLETE'.

The second screenshot shows the same console but with the 'Resources' tab selected in the right-hand pane, also highlighted with a red box. It displays a table of resources created by the stack:

Logical ID	Physical ID	Type	Status	Module
JenkinsInstanc e	i- 0d0c81f349c5 4f9da	AWS::EC2::Inst ance	CREATE_C OMplete	-

Adrenalin MAX | Email - Hareesh Pathipati - | Instances | EC2 Management | CloudFormation - Stack | Welcome to nginx!

eu-west-2.console.aws.amazon.com/cloudformation/home?region=eu-west-2#/stacks?filteringStatus=active&filteringText=&viewNested=true

Services Search [Alt+S] London Hareesh p

CloudFormation > Stacks

Stacks (1) [Refresh] [Delete] [Update] [Stack actions] [Create stack]

Filter by stack name View nested Active < 1 >

Stack name	Status	Created time	Description
cfstack	CREATE_COMPLETE	2023-01-04 17:05:02 UTC+0530	-

Activate Windows
Go to Settings to activate Windows.

Feedback Looking for language selection? Find it in the new Unified Settings

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Type here to search

Adrenalin MAX | Email - Hareesh Pathipati - | Instances | EC2 Management | CloudFormation - Stack cfstack | Welcome to nginx!

eu-west-2.console.aws.amazon.com/ec2/home?region=eu-west-2#Instances?v=3;\$case=tag:true%5C,client:false;\$regex=tags:false%5C,client:false

Services Search [Alt+S] London Hareesh p

New EC2 Experience Tell us what you think

EC2 Dashboard
EC2 Global View
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Tags
Limits

Instances
Instances New
Instance Types
Launch Templates
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Savings Plans
Reserved Instances New
Dedicated Hosts
Capacity Reservations

Images
AMIs

Instances (1/3) Info [Refresh] [Connect] [Instance state] [Actions] [Launch instances]

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
-	i-0eb9d49c179bed210	Terminated	t2.micro	-	No alarms	eu-west-2a
appserver	i-06b619322c5fd8060	Terminated	t2.micro	-	No alarms	eu-west-2a
cfappserver	i-0d0c81f349c54f9da	Running	t2.micro	2/2 checks passed	No alarms	eu-west-2a

Instance: i-0d0c81f349c54f9da [Settings] [Close]

Details Security Networking Storage Status checks Monitoring Tags

Instance summary Info

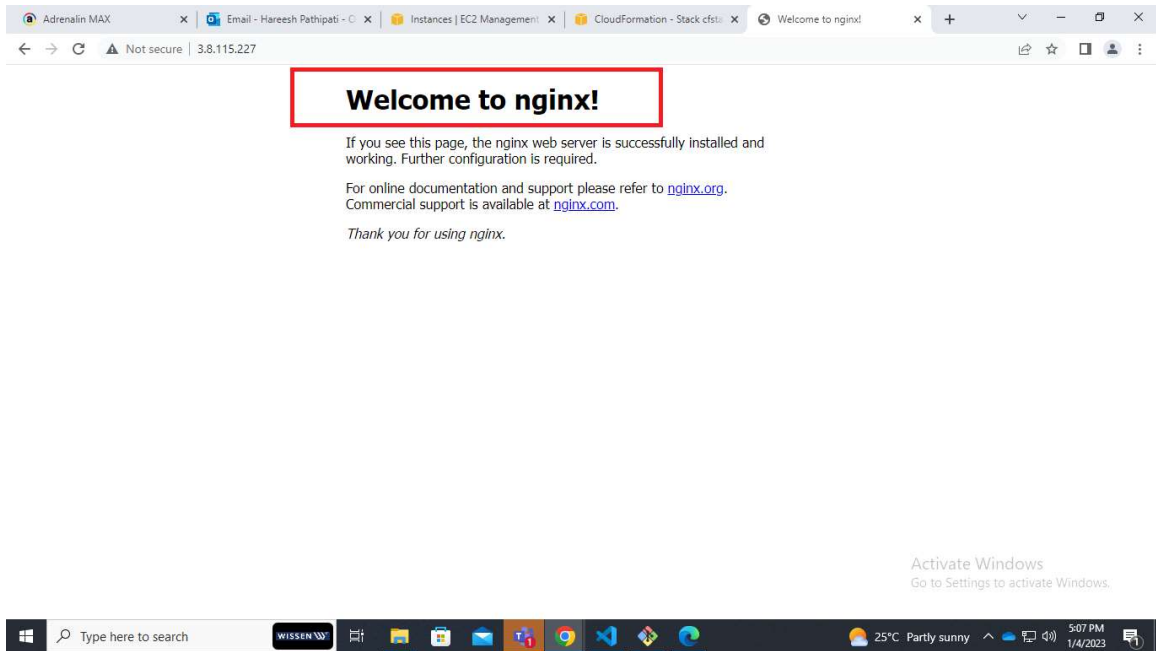
Instance ID i-0d0c81f349c54f9da	Public IPv4 address 3.8.115.227 open address	Private IPv4 addresses 172.31.17.215
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-3-8-115-227.eu-west-2.compute.amazonaws.com open address

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3.8.115.227:8080



It works !

If you're seeing this page via a web browser, it means you've setup Tomcat successfully. Congratulations!

This is the default Tomcat home page. It can be found on the local filesystem at:

`/var/lib/tomcat9/webapps/ROOT/index.html`

Tomcat veterans might be pleased to learn that this system instance of Tomcat is installed with CATALINA_HOME in

`/usr/share/tomcat9` and CATALINA_BASE in

`/var/lib/tomcat9`, following the rules from

`/usr/share/doc/tomcat9-`

`common/RUNNING.txt.gz`.

You might consider installing the following packages, if you haven't already done so:

tomcat9-docs: This package installs a web application that allows to browse the Tomcat 9 documentation locally. Once installed, you can access it by clicking [here](#).

tomcat9-examples: This package installs a web application that allows to access the Tomcat 9 Servlet and JSP examples. Once installed, you can access it by clicking [here](#).

tomcat9-admin: This package installs two web applications that can help managing this Tomcat instance. Once installed, you can access the [manager webapp](#) and the [host-manager webapp](#).





3.8.115.227:8090



**Please wait while Jenkins is
getting ready to work ...**

Your browser will reload automatically when Jenkins is
ready.



