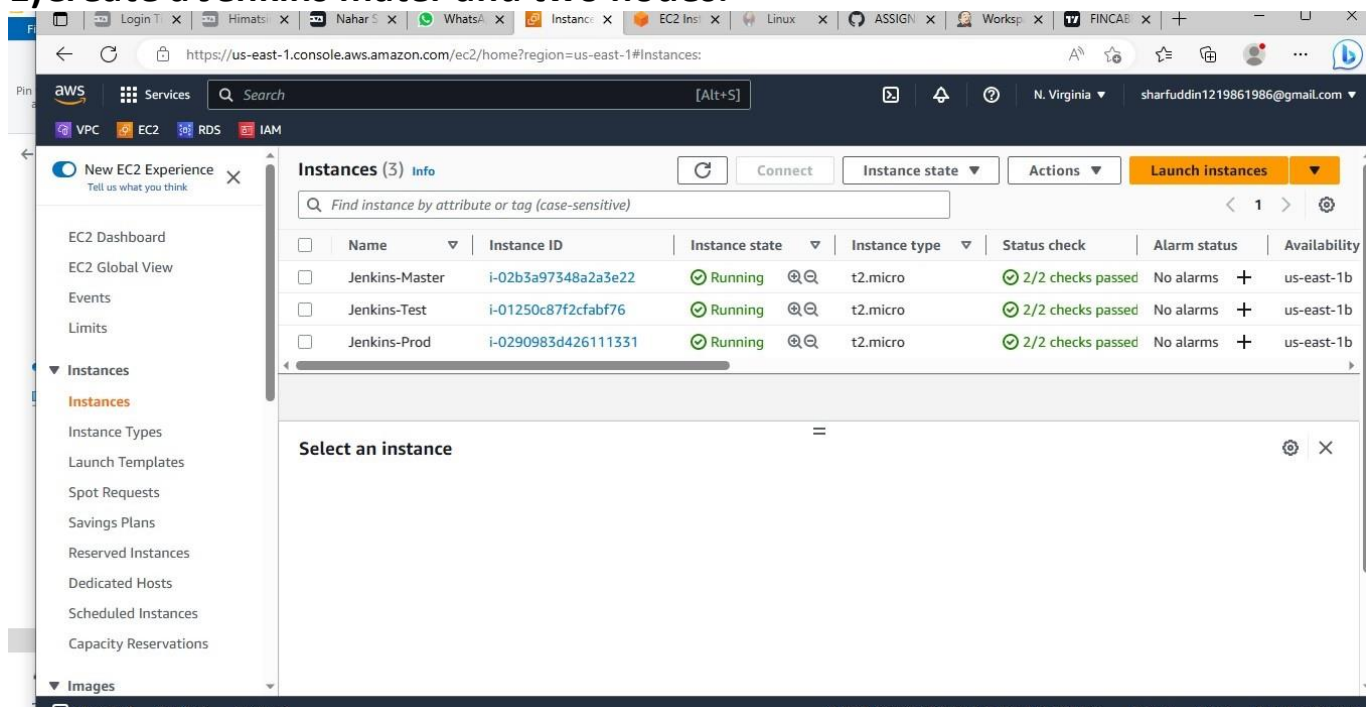


Module-8: Jenkins Assignment - 2

You have been asked to:

- Add 2 nodes to Jenkins master
- Create 2 jobs with the following jobs:
 - Push to test
 - Push to prod
- Once a push is made to test branch copy git files to test server
- Once a push is made to master branch copy git files to prod server

1) Create a Jenkins mater and two nodes.



The screenshot shows the AWS Management Console for the us-east-1 region. The 'Instances' page is active, displaying a table of three EC2 instances:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability
Jenkins-Master	i-02b3a97348a2a3e22	Running	t2.micro	2/2 checks passed	No alarms	us-east-1b
Jenkins-Test	i-01250c87f2cfabf76	Running	t2.micro	2/2 checks passed	No alarms	us-east-1b
Jenkins-Prod	i-0290983d42611331	Running	t2.micro	2/2 checks passed	No alarms	us-east-1b

The left sidebar shows the navigation menu with 'Instances' selected. The top navigation bar includes the AWS logo, search bar, and user profile information.

```

aws
Services
Search [Alt+S]
VPC EC2 RDS IAM
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/main Translation-en [16.3 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/main amd64 c-n-f Metadata [1420 B]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/restricted amd64 c-n-f Metadata [116 B]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/universe amd64 Packages [24.9 kB]
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/universe Translation-en [16.3 kB]
Get:32 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/universe amd64 c-n-f Metadata [880 B]
Get:33 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:34 http://security.ubuntu.com/ubuntu focal-security/restricted Translation-en [249 kB]
Get:35 http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages [838 kB]
Get:36 http://security.ubuntu.com/ubuntu focal-security/universe Translation-en [172 kB]
Get:37 http://security.ubuntu.com/ubuntu focal-security/universe amd64 c-n-f Metadata [17.7 kB]
Get:38 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 Packages [22.9 kB]
Get:39 http://security.ubuntu.com/ubuntu focal-security/multiverse Translation-en [5488 B]
Get:40 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 c-n-f Metadata [540 B]
Fetched 26.9 MB in 5s (5079 kB/s)
Reading package lists... Done
root@ip-172-31-85-135:~# sudo apt install openjdk-11-jdk -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  at-spi2-core ca-certificates-java fontconfig-config fonts-dejavu-core fonts-dejavu-extra java-common libatk-bridge2.0-0 libatk-wrapper-java
  libatk-wrapper-java-jni libatk1.0-0 libatk1.0-data libatspi2.0-0 libavahi-client3 libavahi-common-data libavahi-common3 libcups2
  libdrm-amdgpu1 libdrm-intel1 libdrm-nouveau2 libdrm-radeon1 libfontconfig1 libfontenc1 libgif7 libgl1 libgl1-mesa-dri libglapi-mesa libglvnd0
  libglx-mesa0 libglx0 libgraphite2-3 libice-dev libice6 libjpeg-turbo8 libjpeg8 liblcms2-2 libllvm12 libpciaccess0 libpcsc-lite1
i-0290983d426111331 (Jenkins-Prod)
PublicIPs: 3.82.144.148 PrivateIPs: 172.31.85.135

```

Not secure | 3.86.199.63:8080/manage/

Jenkins

Search (CTRL+K) sharfuddin log out

Dashboard > Manage Jenkins

+ New Item

People

Build History

Manage Jenkins

My Views

Build Queue

No builds in the queue.

Build Executor Status

1 Idle

2 Idle

Manage Jenkins

Search settings /

System Configuration

Configure System
Configure global settings and paths.

Global Tool Configuration
Configure tools, their locations and automatic installers.

Manage Plugins
Add, remove, disable or enable plugins that can extend the functionality of Jenkins.

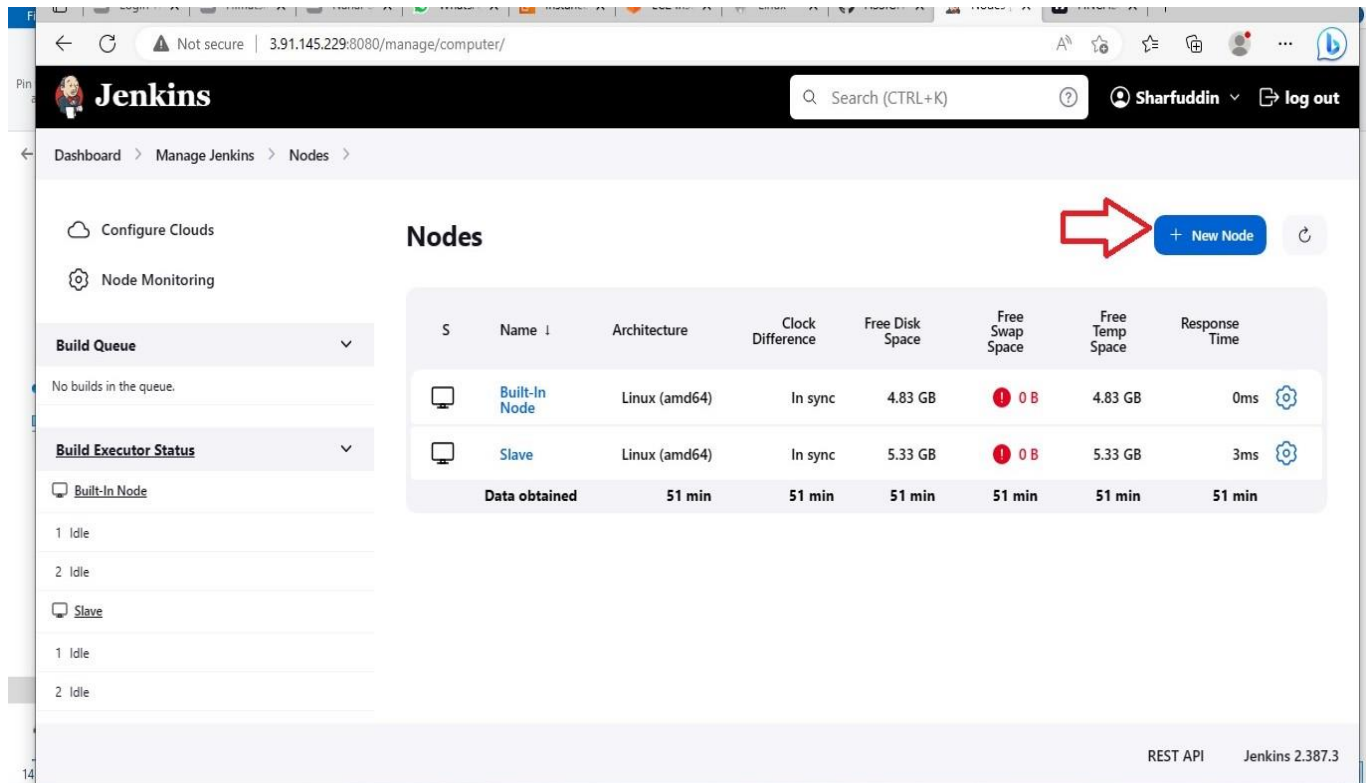
Manage Nodes and Clouds
Add, remove, control and monitor the various nodes that Jenkins runs jobs on.

Security

Configure Global Security

Credentials

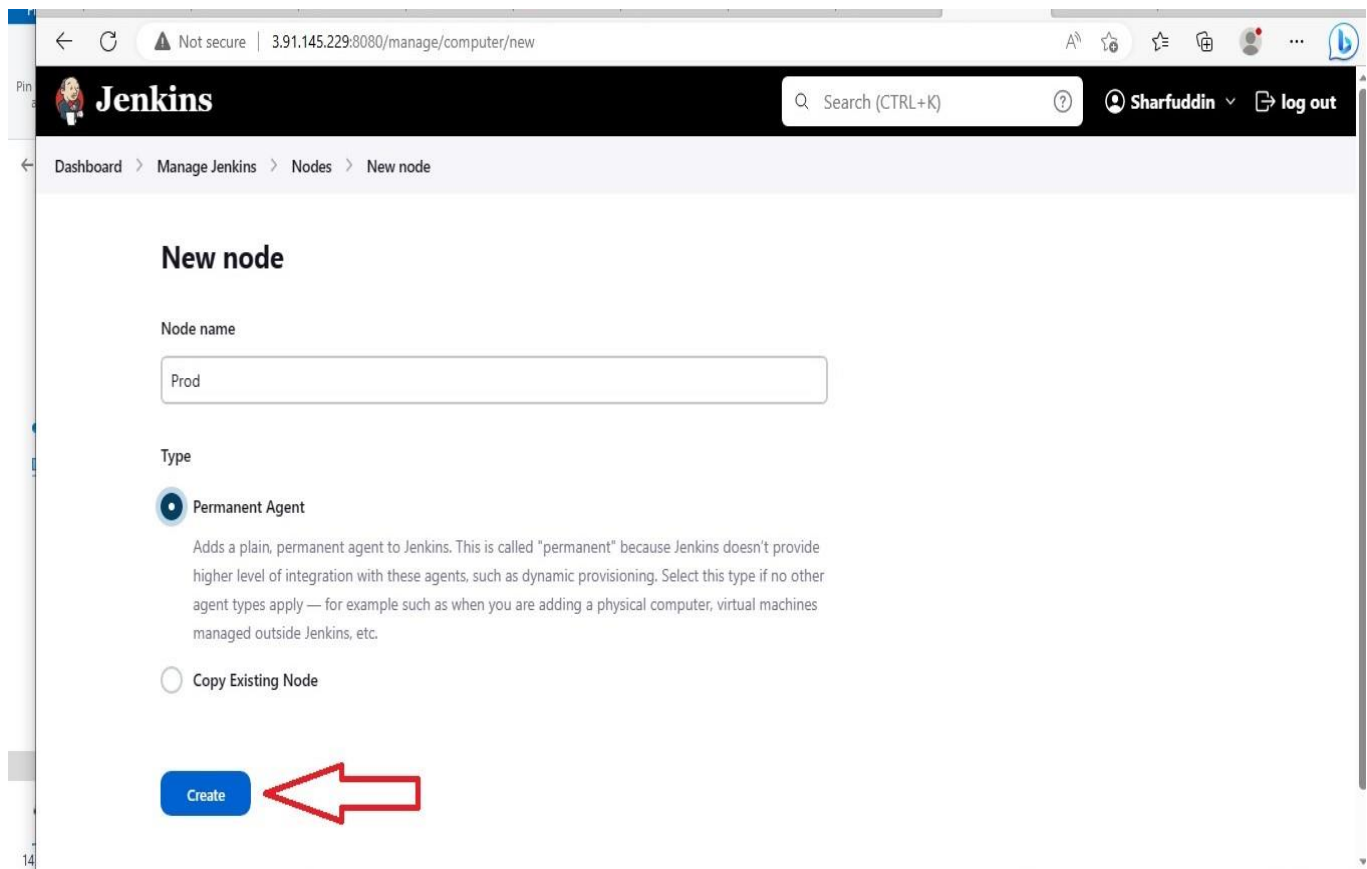
Credential Providers



The screenshot shows the Jenkins 'Nodes' page. A red arrow points to the '+ New Node' button in the top right corner. The page displays a table of existing nodes:

S	Name	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time
	Built-In Node	Linux (amd64)	In sync	4.83 GB	0 B	4.83 GB	0ms
	Slave	Linux (amd64)	In sync	5.33 GB	0 B	5.33 GB	3ms
Data obtained		51 min	51 min	51 min	51 min	51 min	51 min

On the left sidebar, under 'Build Queue', it says 'No builds in the queue.' Under 'Build Executor Status', it shows 'Built-In Node' with 1 Idle executor and 'Slave' with 2 Idle executors.

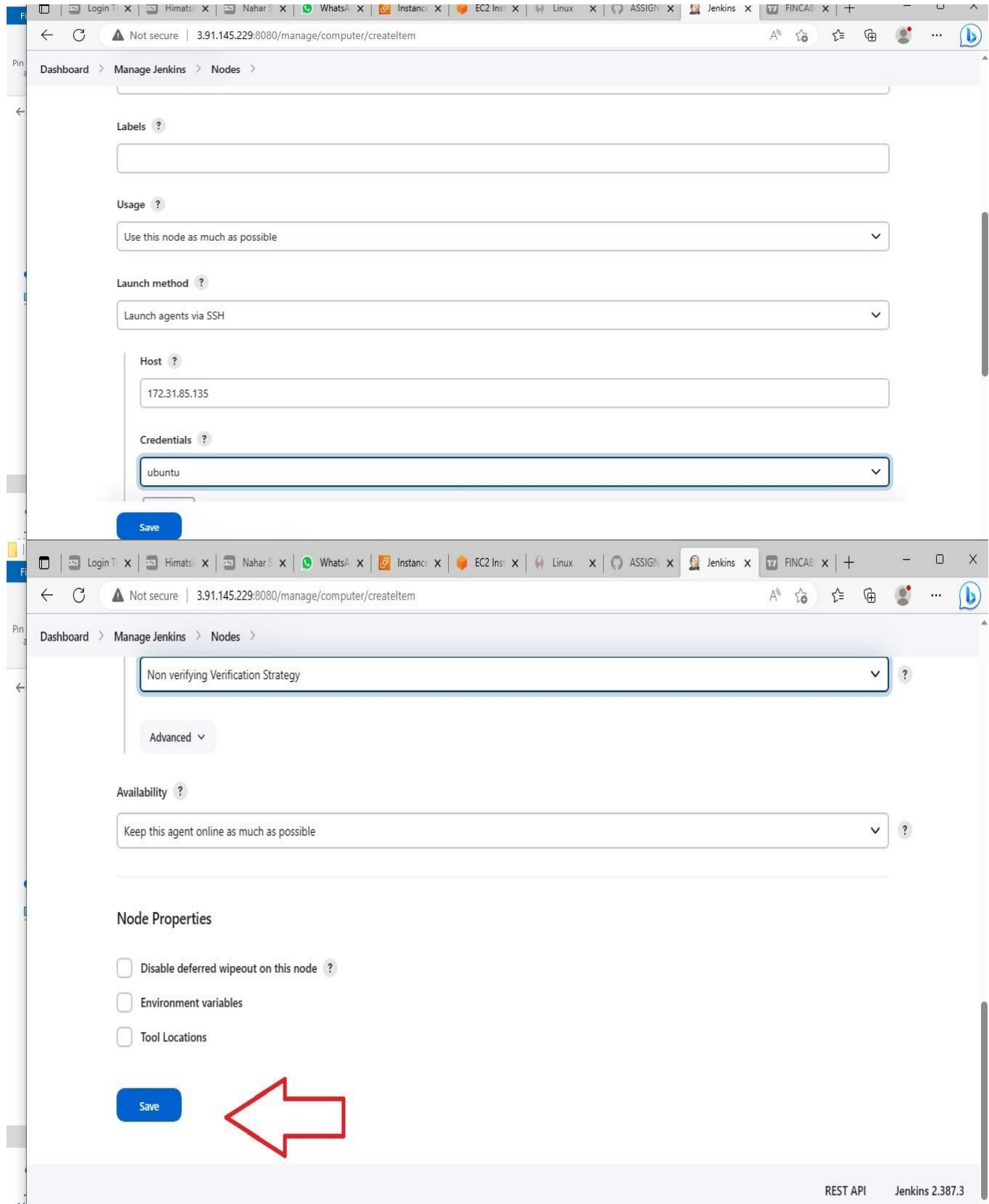


The screenshot shows the 'New node' page in Jenkins. A red arrow points to the 'Create' button at the bottom. The 'Node name' field contains 'Prod'. The 'Type' section has two options: 'Permanent Agent' (selected) and 'Copy Existing Node'.

Permanent Agent

Adds a plain, permanent agent to Jenkins. This is called "permanent" because Jenkins doesn't provide higher level of integration with these agents, such as dynamic provisioning. Select this type if no other agent types apply — for example such as when you are adding a physical computer, virtual machines managed outside Jenkins, etc.

Copy Existing Node



The screenshot shows the Jenkins 'Create Item' page for a new node. The browser address bar indicates the URL is 3.91.145.229:8080/manage/computer/createItem. The page is divided into two main sections: the top section for basic node configuration and the bottom section for advanced settings and node properties.

Basic Configuration:

- Labels:** An empty text input field.
- Usage:** A dropdown menu set to 'Use this node as much as possible'.
- Launch method:** A dropdown menu set to 'Launch agents via SSH'.
- Host:** A text input field containing '172.31.85.135'.
- Credentials:** A dropdown menu set to 'ubuntu'.
- Save:** A blue button to save the configuration.

Advanced Settings:

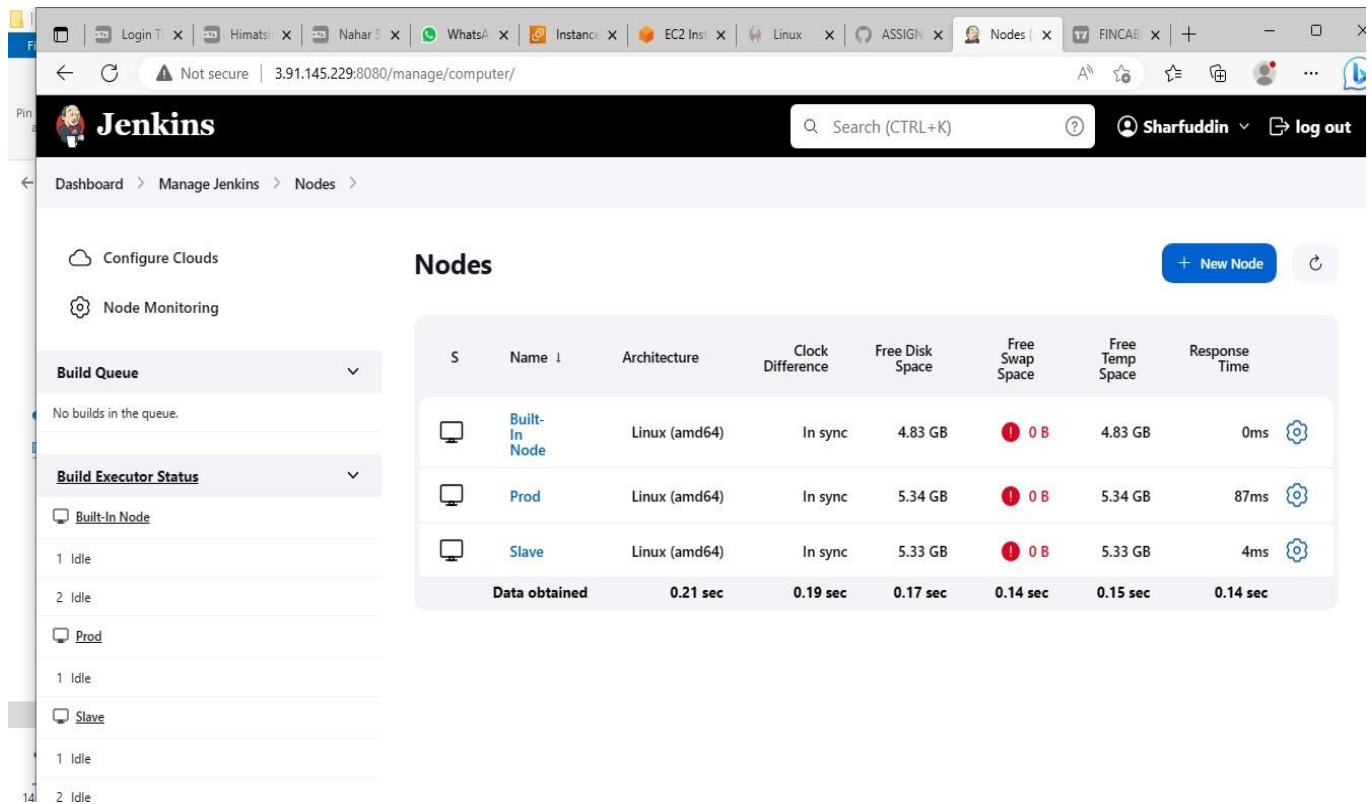
- Non verifying Verification Strategy:** A dropdown menu.
- Advanced:** A button to expand advanced options.
- Availability:** A dropdown menu set to 'Keep this agent online as much as possible'.

Node Properties:

- ☐ Disable deferred wipeout on this node
- ☐ Environment variables
- ☐ Tool Locations
- Save:** A blue button to save the node properties.

A red arrow points to the 'Save' button in the Node Properties section.

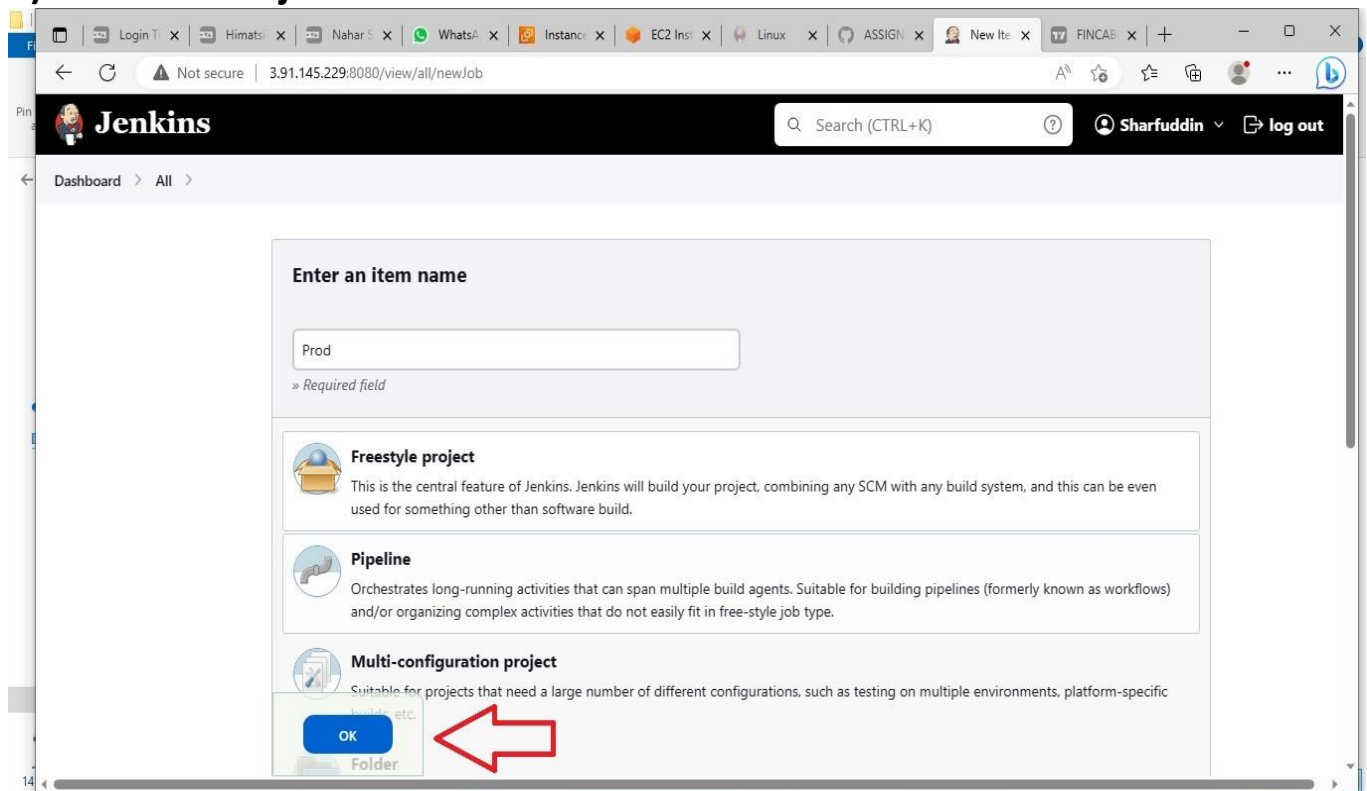
REST API Jenkins 2.387.3



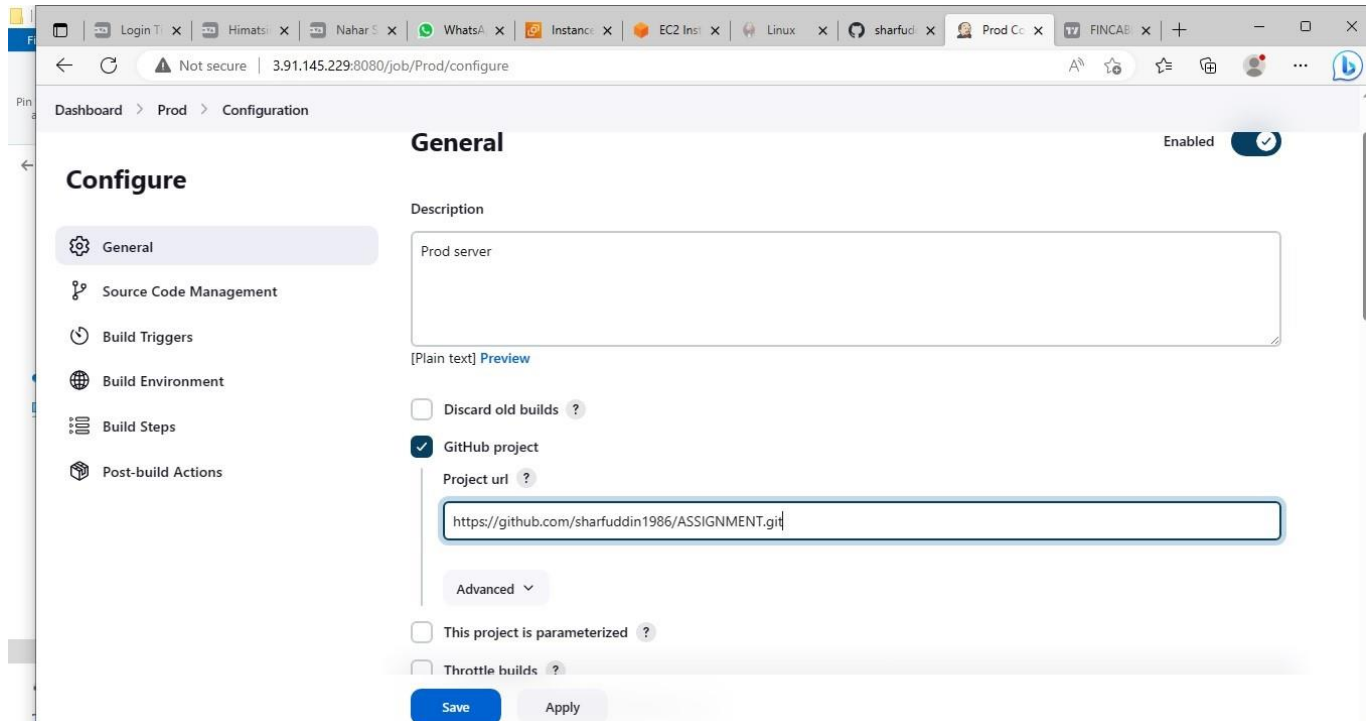
The screenshot shows the Jenkins 'Nodes' page. The left sidebar contains 'Build Queue' (No builds in the queue) and 'Build Executor Status' (Built-In Node, Prod, Slave). The main table lists the nodes:

S	Name	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time
	Built-In Node	Linux (amd64)	In sync	4.83 GB	0 B	4.83 GB	0ms
	Prod	Linux (amd64)	In sync	5.34 GB	0 B	5.34 GB	87ms
	Slave	Linux (amd64)	In sync	5.33 GB	0 B	5.33 GB	4ms
Data obtained		0.21 sec	0.19 sec	0.17 sec	0.14 sec	0.15 sec	0.14 sec

2) Create a two job



The screenshot shows the Jenkins 'Create new item' page. The 'Enter an item name' field contains 'Prod'. Below the field, there are three options: 'Freestyle project', 'Pipeline', and 'Multi-configuration project'. A red arrow points to the 'Folder' button at the bottom left.



Dashboard > Prod > Configuration

Configure

General

Source Code Management


Build Triggers

Build Environment

Build Steps

Post-build Actions

General

Enabled 

Description

Prod server

[Plain text] [Preview](#)

☐ Discard old builds ?

☒ GitHub project

Project uri ?

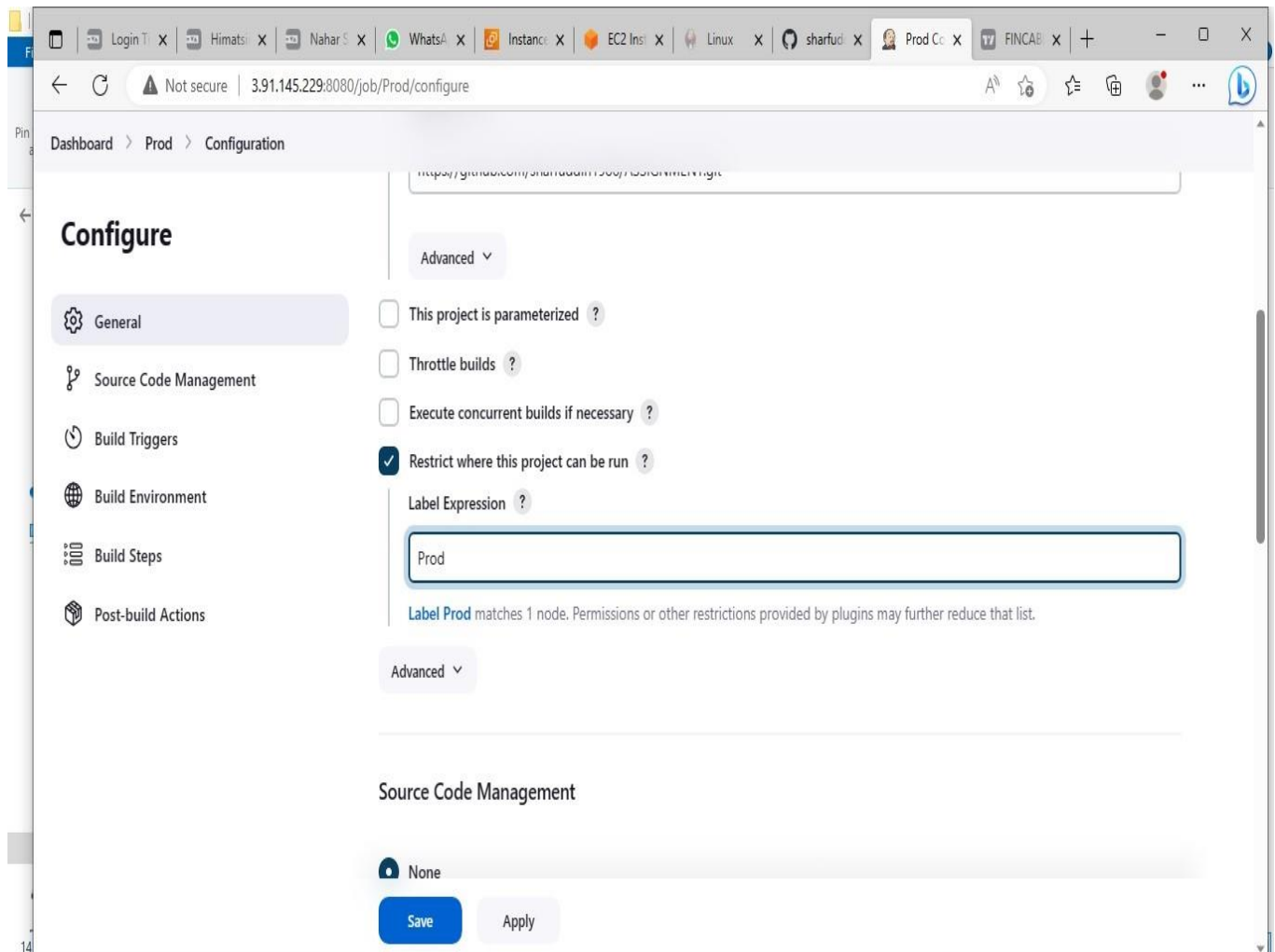
<https://github.com/sharfuddin1986/ASSIGNMENT.git>

Advanced ▾

☐ This project is parameterized ?

☐ Throttle builds ?

[Save](#) [Apply](#)



Dashboard > Prod > Configuration

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

General

<https://github.com/sharfuddin1986/ASSIGNMENT.git>

Advanced ▾

☐ This project is parameterized ?

☐ Throttle builds ?

☐ Execute concurrent builds if necessary ?

☒ Restrict where this project can be run ?


Label Expression ?

Prod

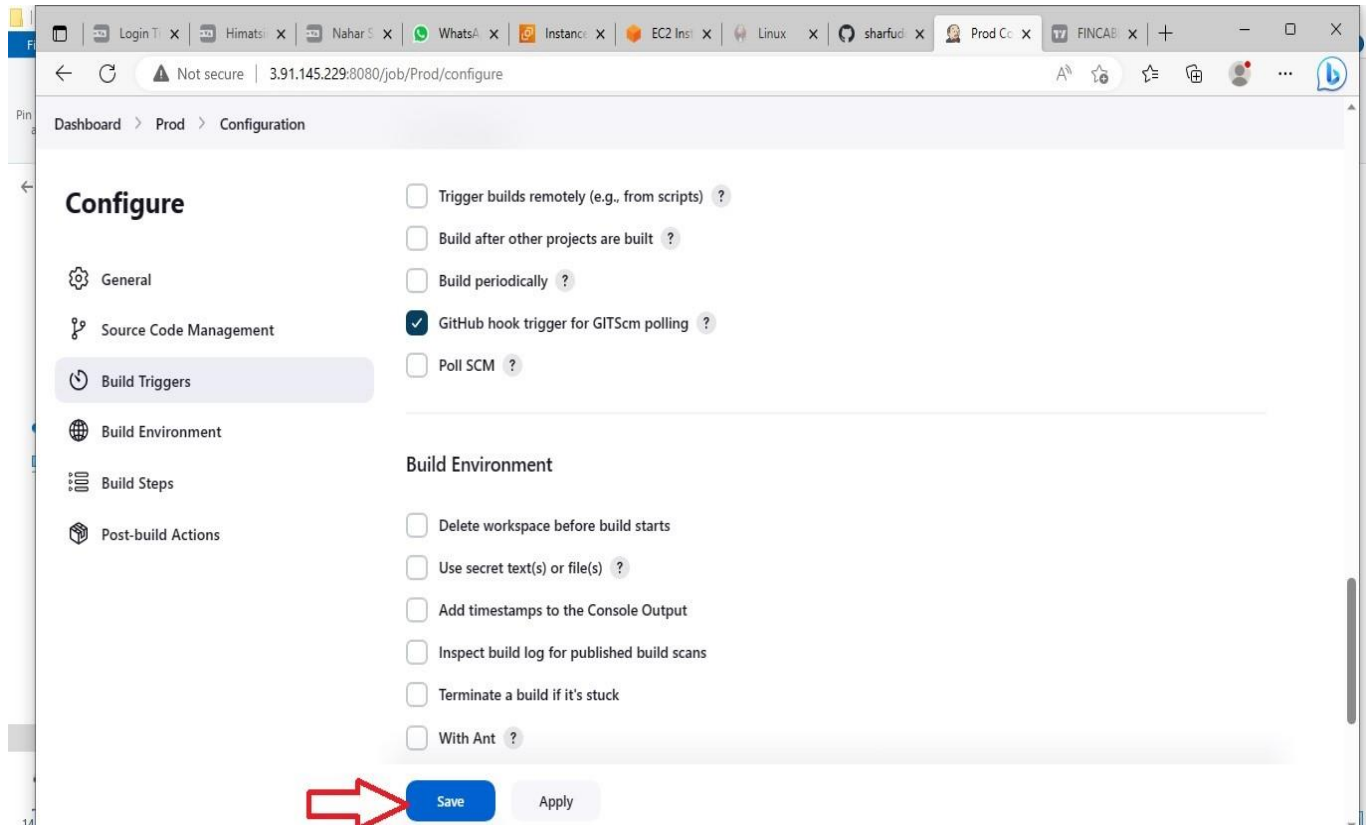
[Label Prod](#) matches 1 node. Permissions or other restrictions provided by plugins may further reduce that list.

Advanced ▾

Source Code Management

 None

[Save](#) [Apply](#)



Dashboard > Prod > Configuration

Configure

- General
- Source Code Management
- Build Triggers**
- Build Environment
- Build Steps
- Post-build Actions

☐ Trigger builds remotely (e.g., from scripts) ?

☐ Build after other projects are built ?

☐ Build periodically ?

☒ GitHub hook trigger for GITScm polling ?

☐ Poll SCM ?

Build Environment

☐ Delete workspace before build starts

☐ Use secret text(s) or file(s) ?

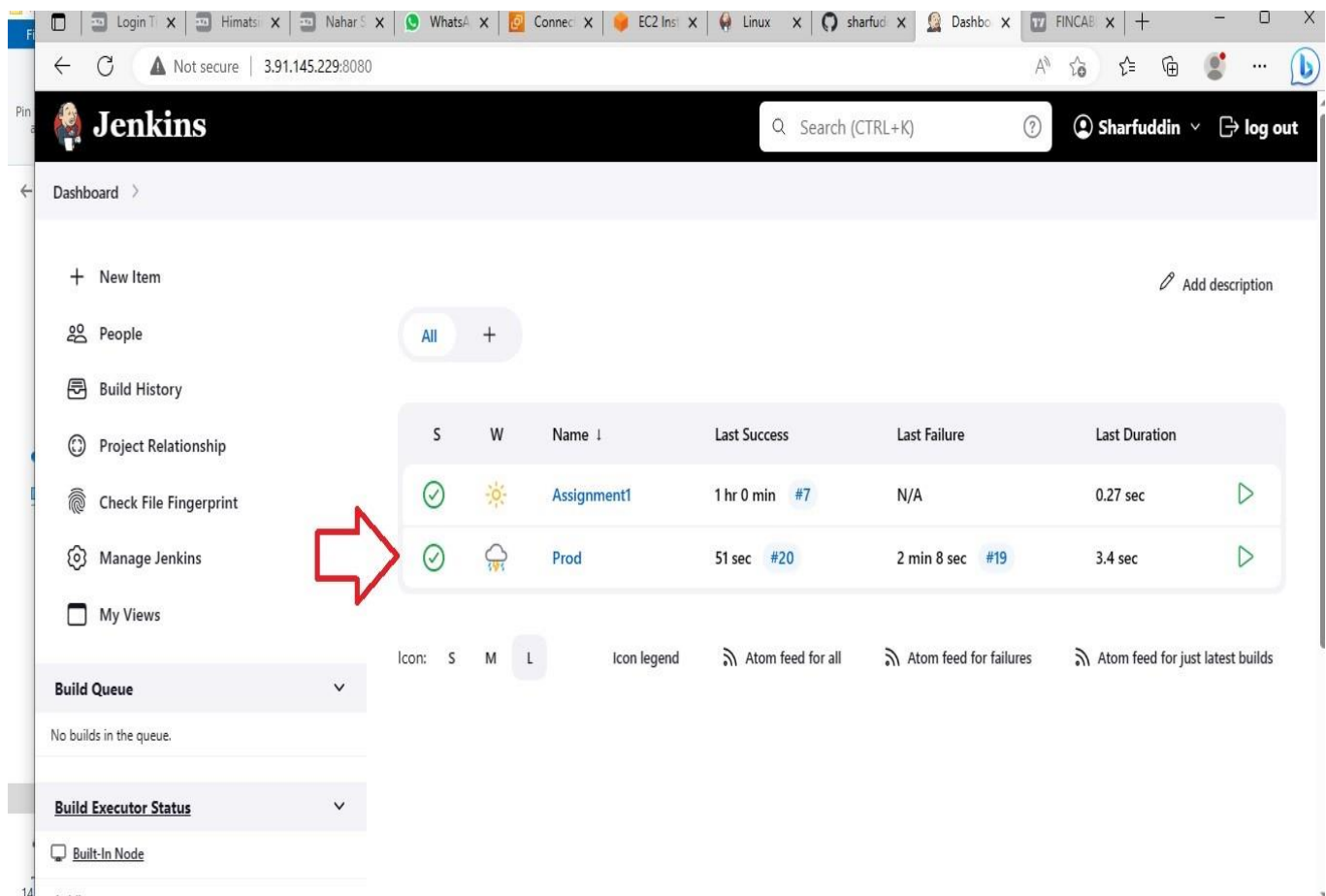
☐ Add timestamps to the Console Output

☐ Inspect build log for published build scans

☐ Terminate a build if it's stuck

☐ With Ant ?

Save Apply



Dashboard >

+ New Item

People

Build History

Project Relationship

Check File Fingerprint

Manage Jenkins

My Views

Build Queue

No builds in the queue.

Build Executor Status

Built-In Node

S	W	Name ↓	Last Success	Last Failure	Last Duration
✓	☀	Assignment1	1 hr 0 min #7	N/A	0.27 sec
✓	☁	Prod	51 sec #20	2 min 8 sec #19	3.4 sec

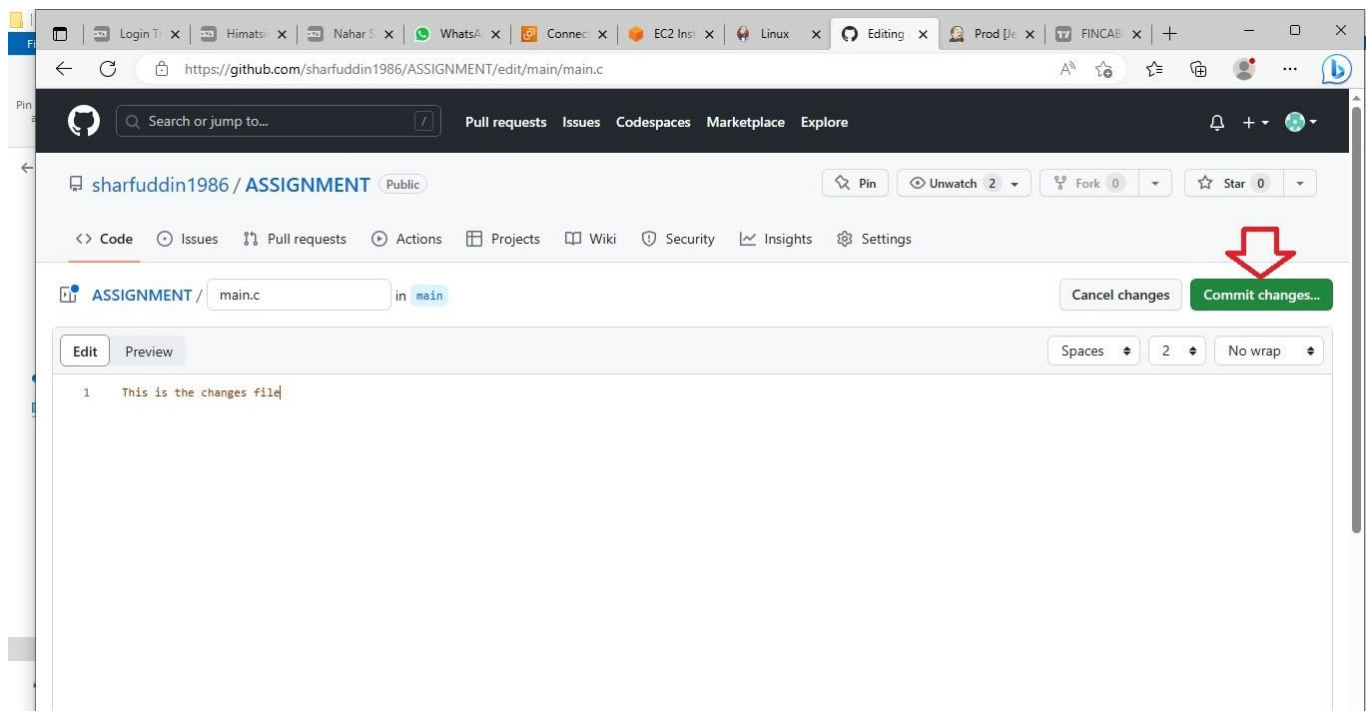
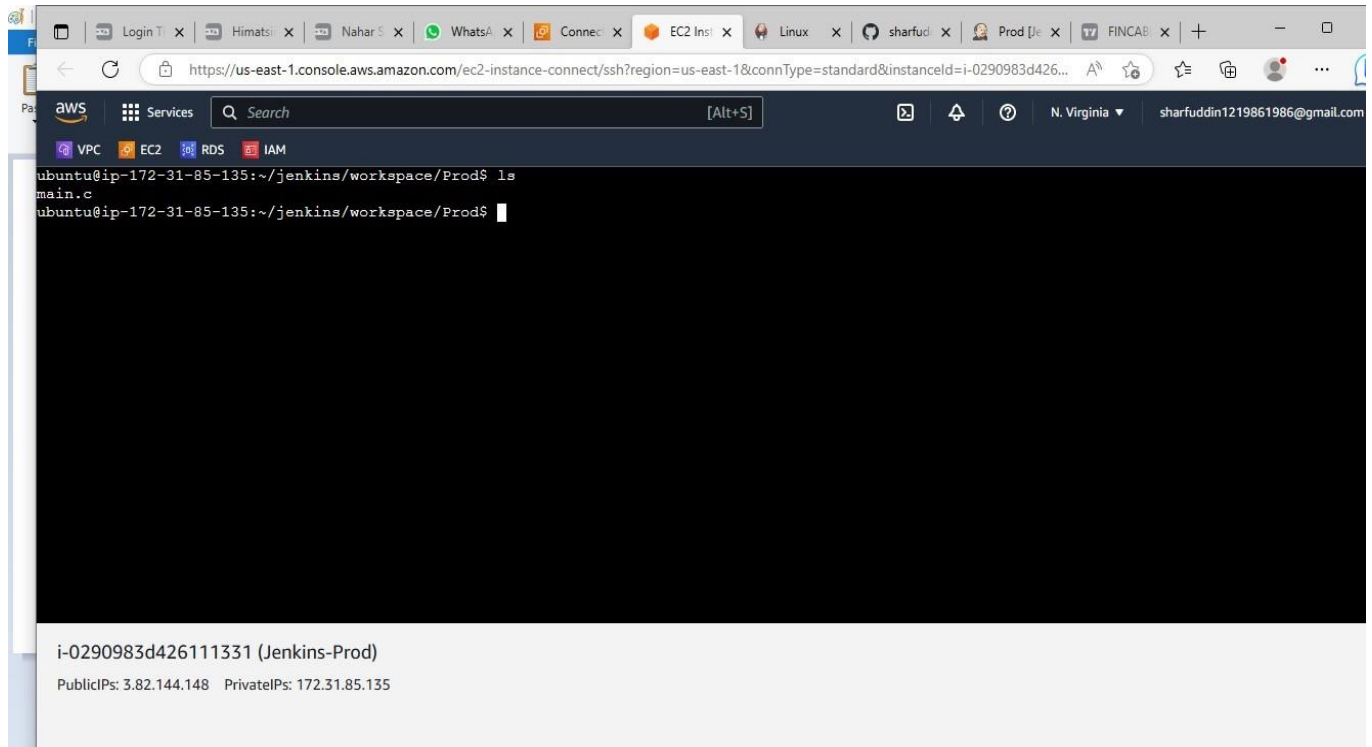
Icon: S M L

Icon legend

Atom feed for all

Atom feed for failures

Atom feed for just latest builds



All the steps completed and screenshot also attached, still if any thing requires, please email me or call me on my registered number and please share the obtained marks on my email.