

CLOUD COMPUTING

NAME - ANUR SHARMA

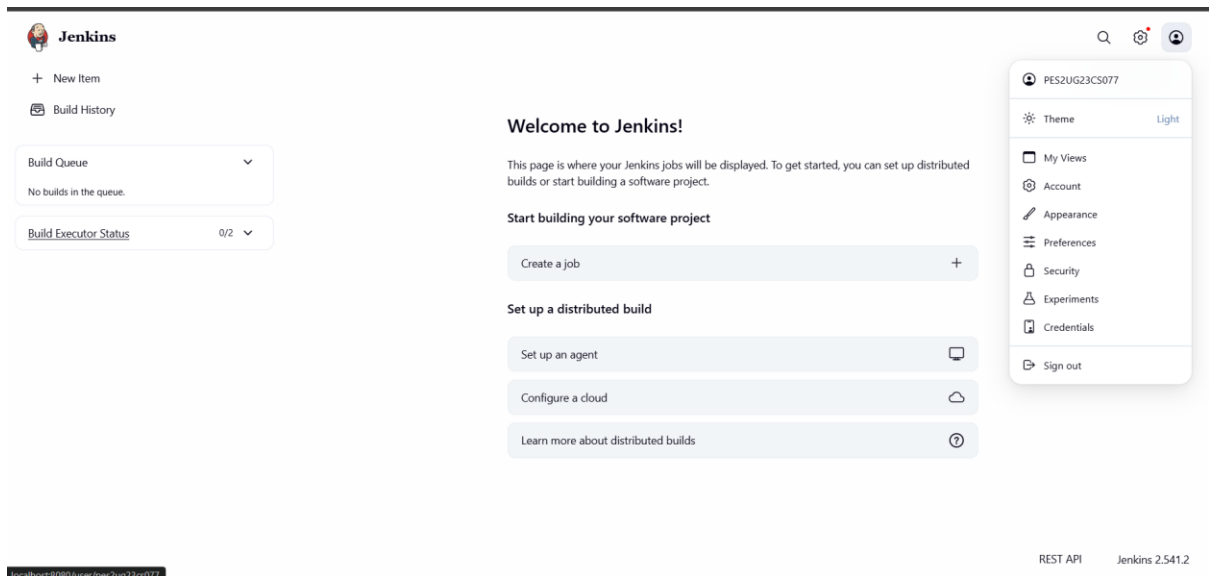
SRN – PES2UG23CS077

TASK 1

Ss1:

```
ankur@JITU: /mnt/c/Users/an x + v
2026-02-26 08:46:37.815+0000 [id=54] INFO jenkins.InitReactorRunner$1#onAttained: Loaded all jobs
2026-02-26 08:46:37.819+0000 [id=49] INFO jenkins.InitReactorRunner$1#onAttained: Configuration for all jobs updated
2026-02-26 08:46:37.880+0000 [id=75] INFO hudson.util.Retrier#start: Attempt #1 to do the action check updates server
2026-02-26 08:46:38.335+0000 [id=56] INFO jenkins.install.SetupWizard#init:
[LF]>
[LF]> *****
[LF]> *****
[LF]> *****
[LF]>
[LF]> Jenkins initial setup is required. An admin user has been created and a password generated.
[LF]> Please use the following password to proceed to installation:
[LF]>
[LF]> 5d2db3cb5a054e09884fbde4de767d10
[LF]>
[LF]> This may also be found at: /var/jenkins_home/secrets/initialAdminPassword
[LF]>
[LF]> *****
[LF]> *****
[LF]> *****
2026-02-26 08:46:47.460+0000 [id=52] INFO jenkins.InitReactorRunner$1#onAttained: Completed initialization
2026-02-26 08:46:47.481+0000 [id=39] INFO hudson.lifecycle.Lifecycle#onReady: Jenkins is fully up and running
2026-02-26 08:46:48.431+0000 [id=75] INFO h.m.DownloadService$Downloadable#load: Obtained the updated data file for hudson.tasks.Maven.MavenInstaller
2026-02-26 08:46:48.432+0000 [id=75] INFO hudson.util.Retrier#start: Performed the action check updates server successfully at the attempt #1
2026-02-26 08:48:01.052+0000 [id=92] INFO hudson.PluginManager#install: Starting installation of a batch of 19 plugins plus their dependencies
```

Ss2:



TASK -2

Ss3:

```
#6 91.28 Setting up g++ (4:11.2.0-1ubuntu1) ...
#6 91.32 update-alternatives: using /usr/bin/g++ to provide /usr/bin/c++ (c++) in auto mode
#6 91.32 update-alternatives: warning: skip creation of /usr/share/man/man1/c++.1.gz because associated file /usr/share/man/man1/g++.1.gz (of
link group c++) doesn't exist
#6 91.33 Processing triggers for libc-bin (2.35-0ubuntu3.13) ...
#6 DONE 91.6s

#7 [3/5] WORKDIR /app
#7 DONE 0.1s

#8 [4/5] COPY app.cpp .
#8 DONE 0.1s

#9 [5/5] RUN g++ app.cpp -o app
#9 DONE 0.7s

#10 exporting to image
#10 exporting layers
#10 exporting layers 1.4s done
#10 writing image sha256:7a14cd34452d9a407bb1046fd4621ac4054d75843a01bb7abdcdf11764ec2d02e done
#10 naming to docker.io/library/backend-app done
#10 DONE 1.4s
Finished: SUCCESS
```

Jenkins 2.541.2

Ss4:

The screenshot shows the Jenkins web interface. At the top, the Jenkins logo and the project name 'PES2UG23CS077-backend...' are visible. Below the project name, there is a sidebar with navigation links: Status, Changes, Workspace, Build Now, Configure, Delete Project, Git Polling Log, and Rename. The main area displays the build status for 'PES2UG23CS077-backend-build' as 'SUCCESS'. Below the status, there is a 'Permalinks' section with a list of links for various build types: Last build (#7), Last stable build (#7), Last successful build (#7), Last failed build (#5), Last unsuccessful build (#5), and Last completed build (#7). On the right side, there is a search icon and a button labeled 'Add desc'.

TASK 3

Ss5:

The screenshot shows the Jenkins configuration page for a project. The 'Configure' tab is selected, and the 'General' sub-tab is active. Under the 'General' section, there is a checkbox labeled 'This project is parameterized' which is checked. Below this, there is a 'Choice Parameter' section. The 'Name' field is set to 'Backend_Count'. The 'Choices' field contains a list of two items: '1' and '2'. The 'Description' field is empty.

Ss6:

</> Changes

Workspace

Build with Parameters

Configure

Delete Project

Git Polling Log

Rename

This build requires parameters:

Backend_Count

1

Build Cancel

Builds >

Filter

Build count1:

Edit Build Information

Delete build '#8'

Parameters

Timings

Git Build Data

Previous Build

building in workspace /var/jenkins_home/workspace/PES2UG23CS071-backend-build

The recommended git tool is: NONE

No credentials specified

> git rev-parse --resolve-git-dir /var/jenkins_home/workspace/PES2UG23CS071-backend-build/.git # timeout=10

fetching changes from the remote git repository

> git config remote.origin.url https://github.com/pes2ug23cs071-igtm/CC-Lab6.git # timeout=10

fetching upstream changes from https://github.com/pes2ug23cs071-igtm/CC-Lab6.git

> git --version # timeout=10

> git --version # 'git version 2.47.3'

> git fetch --tags --force --progress -- https://github.com/pes2ug23cs071-igtm/CC-Lab6.git +refs/heads/*:refs/remotes/origin/* # timeout=10

> git rev-parse refs/remotes/origin/main^{commit} # timeout=10

Checking out Revision 5e3162c17e0aacbe12d2a6b795f0e3efcc237b0c (refs/remotes/origin/main)

> git config core.sparsecheckout # timeout=10

> git checkout -f 5e3162c17e0aacbe12d2a6b795f0e3efcc237b0c # timeout=10

Commit message: "Initial Jenkins lab setup"

> git rev-list --no-walk 5e3162c17e0aacbe12d2a6b795f0e3efcc237b0c # timeout=10

[PES2UG23CS071-backend-build] \$ /bin/sh -xe /tmp/jenkins12201564733258790841.sh

+ docker rm -f backend1 backend2

Error response from daemon: No such container: backend1

Error response from daemon: No such container: backend2

+ [- 1]

+ docker run -d --name backend1 backend-app

7a545279ebbdacdf575e4e2871912eeb0a0bcd14e1a9024ed1aaf3d5ae7213

+ docker run -d --name backend2 backend-app

e878f9af9fe5217b584bbc4653f29aed0656a30117ee1b88fcc3acaa01d7e171

Finished: SUCCESS

Build_Count = 2

</> Changes

Workspace

Build with Parameters

Configure

Delete Project

Git Polling Log

Rename

This build requires parameters:

Backend_Count

2

Build Cancel

Builds >

Filter

Today

9:57 AM

9:55 AM

</> Changes

Workspace

Build with Parameters

Configure

Delete Project

Git Polling Log

Rename

Permalinks

- Last build (#10), 47 sec ago
- Last stable build (#10), 47 sec ago
- Last successful build (#10), 47 sec ago
- Last failed build (#5), 24 min ago
- Last unsuccessful build (#5), 24 min ago
- Last completed build (#10), 47 sec ago

Builds >

Filter

Today

✓ #10 9:57 AM

TASK 4:

Graph

Start

Checkout SCM

Build Backend Image

Deploy Backend...

Deploy NGINX Load...

Post Actions

End

Search

✓ Checkout SCM 1s

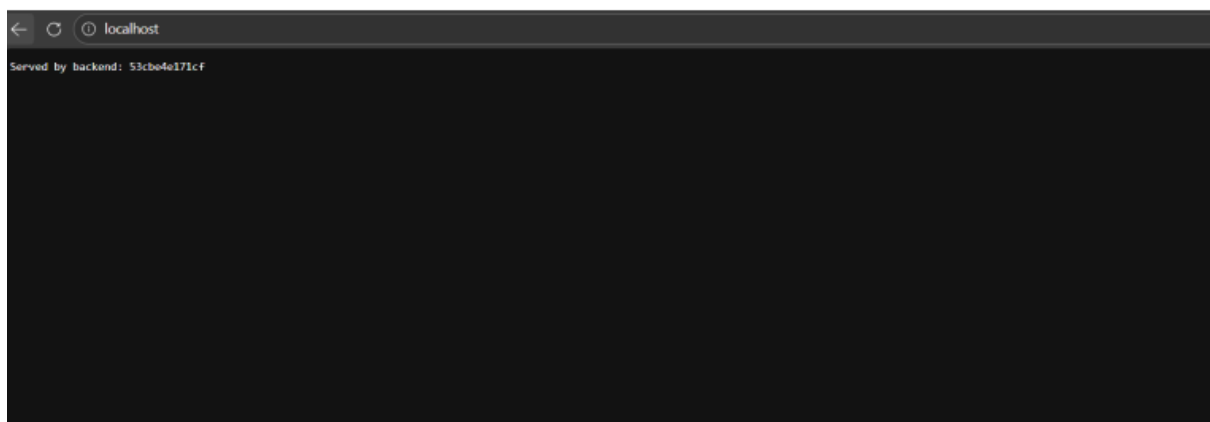
✓ Build Backend Image 2s

✓ Deploy Backend Containers 1s

✓ Post Actions 99ms Started 5m 9s ago Jenkins

✓ Pipeline executed successfully. NGINX load balancer is running. 36ms

ⓘ Pipeline executed successfully. NGINX load balancer is running.

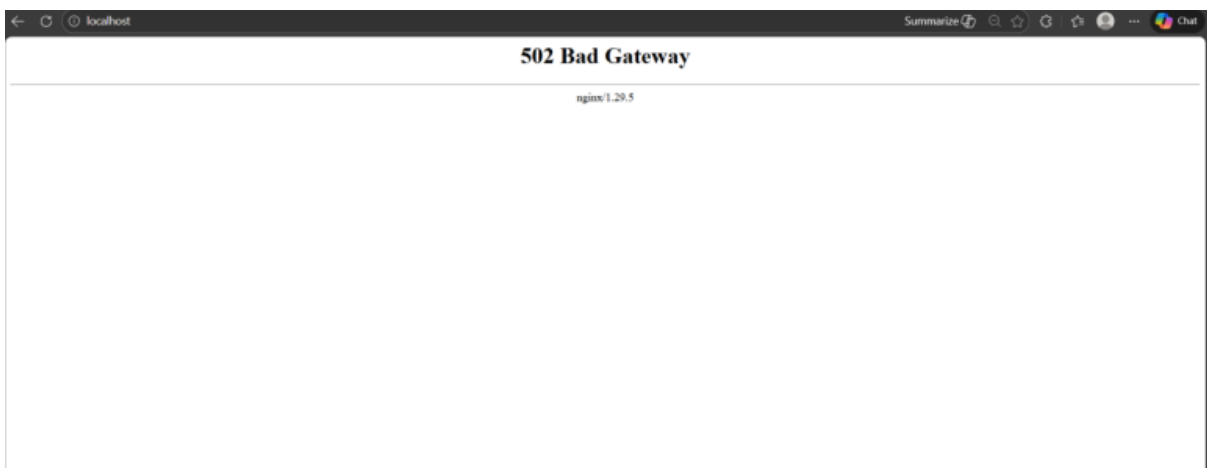
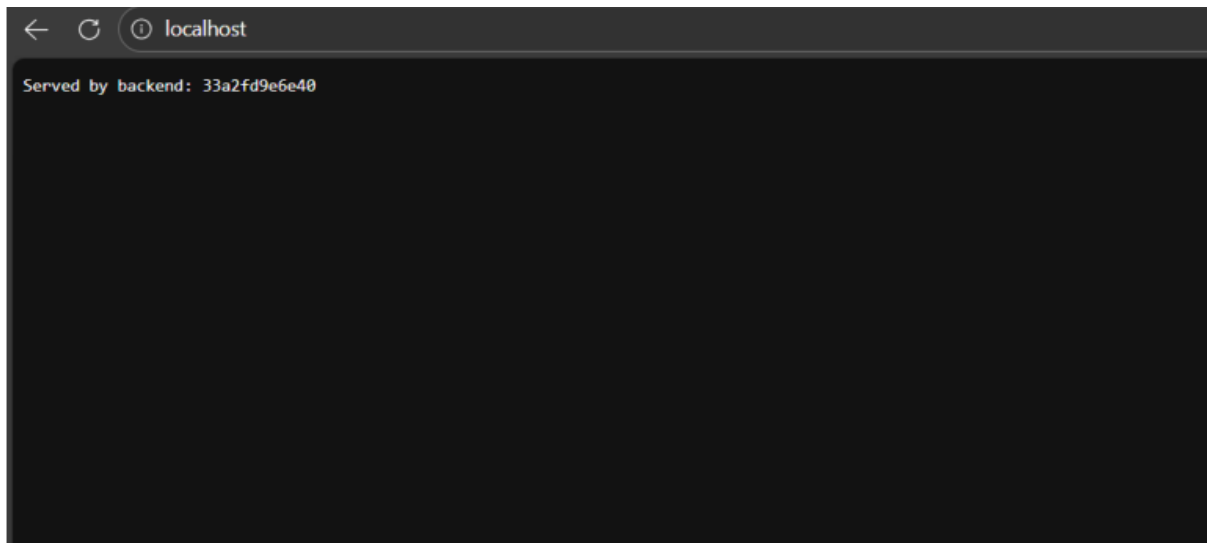


Refresh:

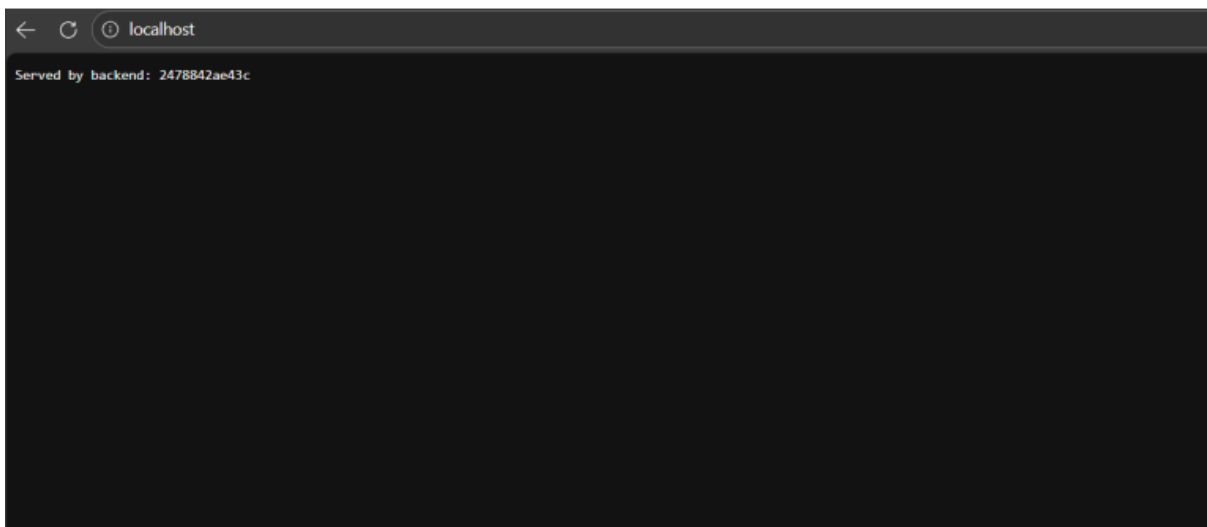


TASK 5

1.Round Robin



2.Least Connections Strategy





IP Hash Strategy :

