MIDSEM ASSIGNMENTS

Assignment_1(b)

Developing and Deploying a Node.js app from Docker to Kubernetes

From,

TEAM_4

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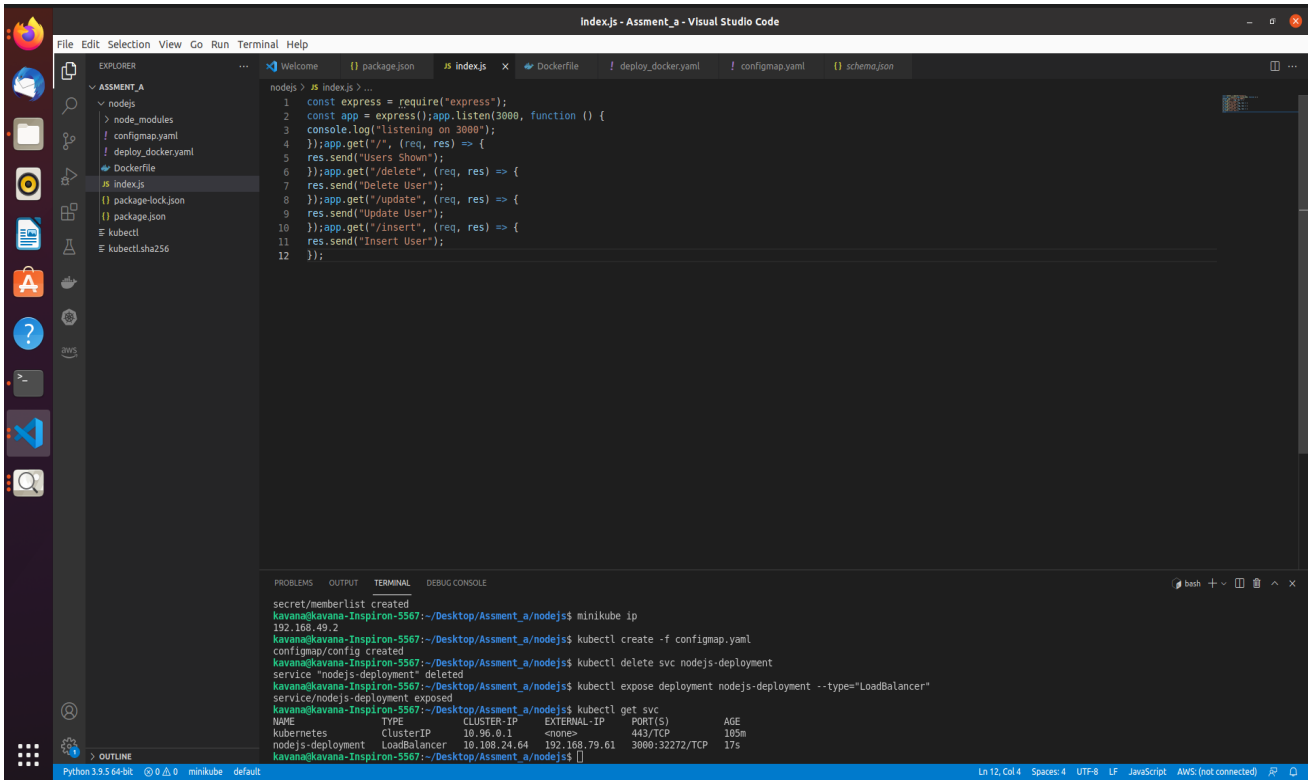
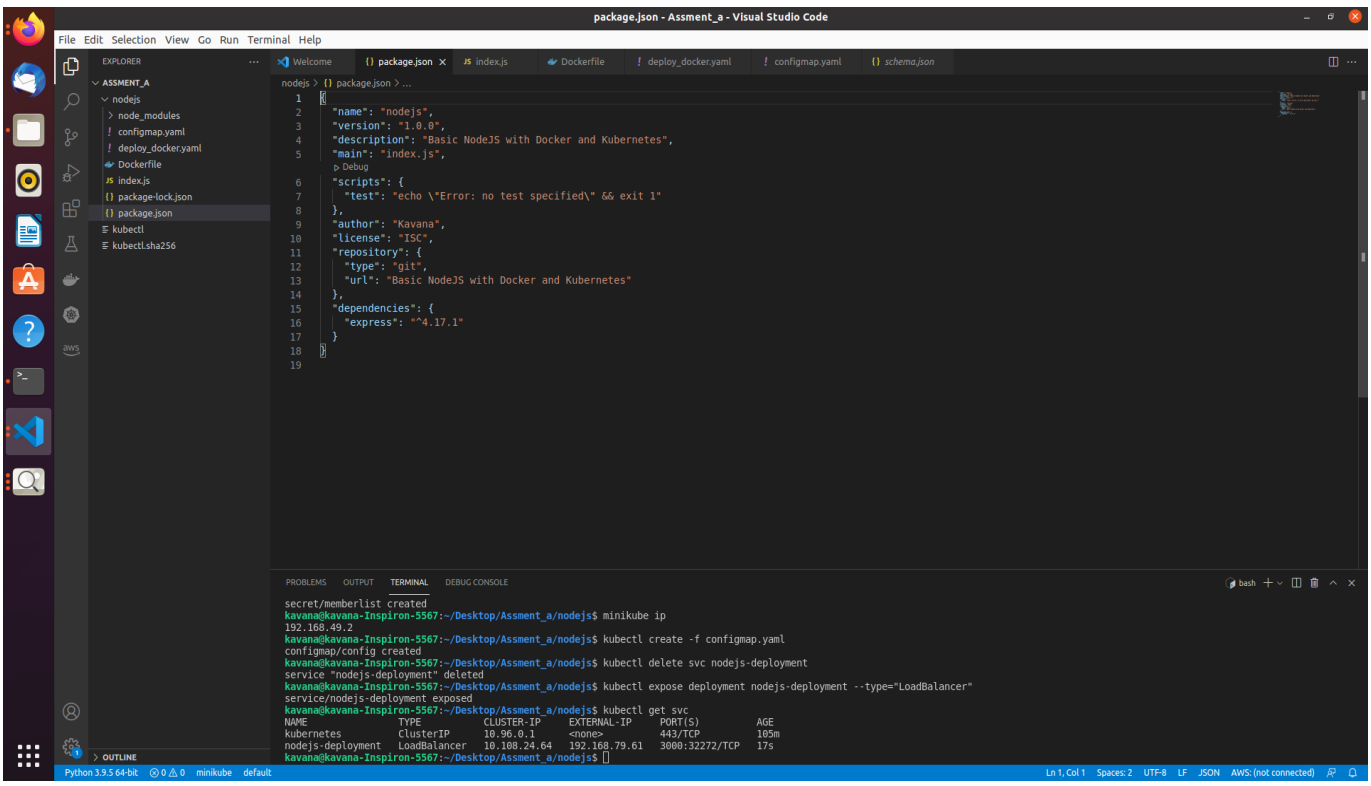
To,

Dr.Uma Sheshadri
Professor,CSE(HOD)

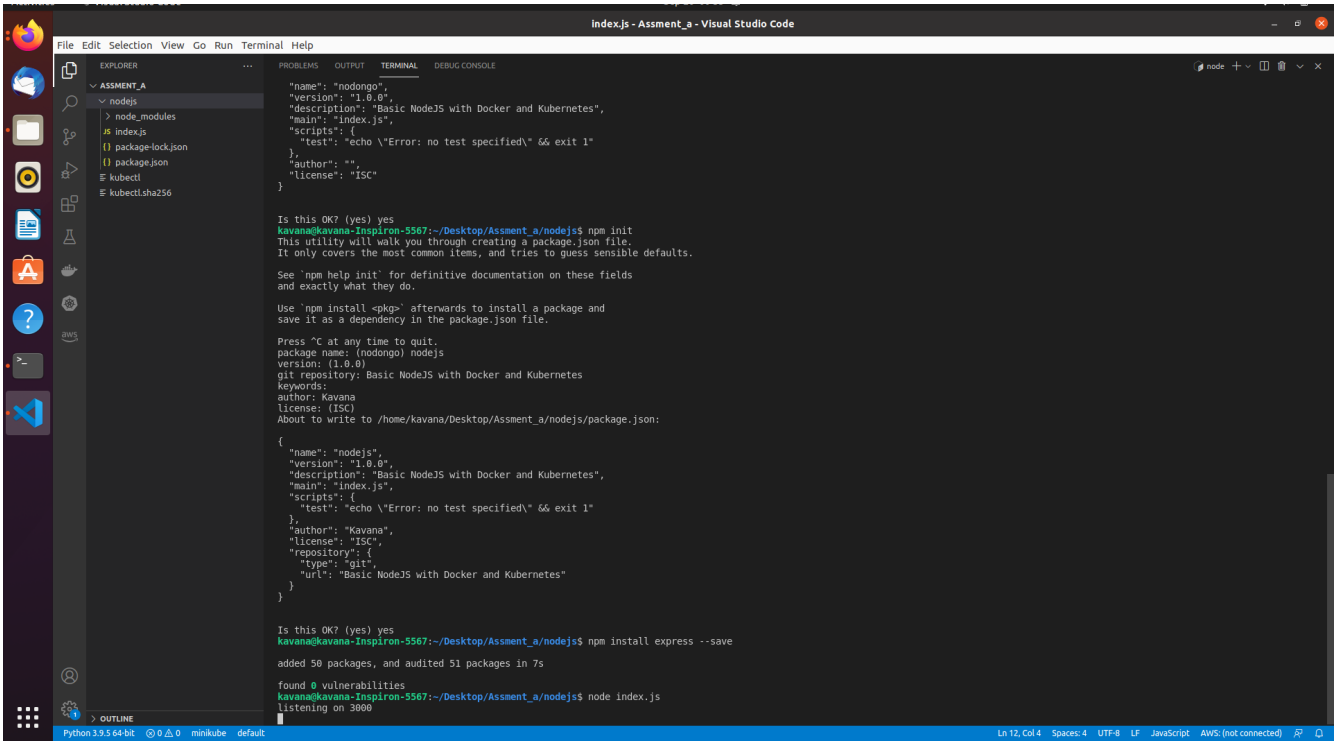
1.Creating Node.js app

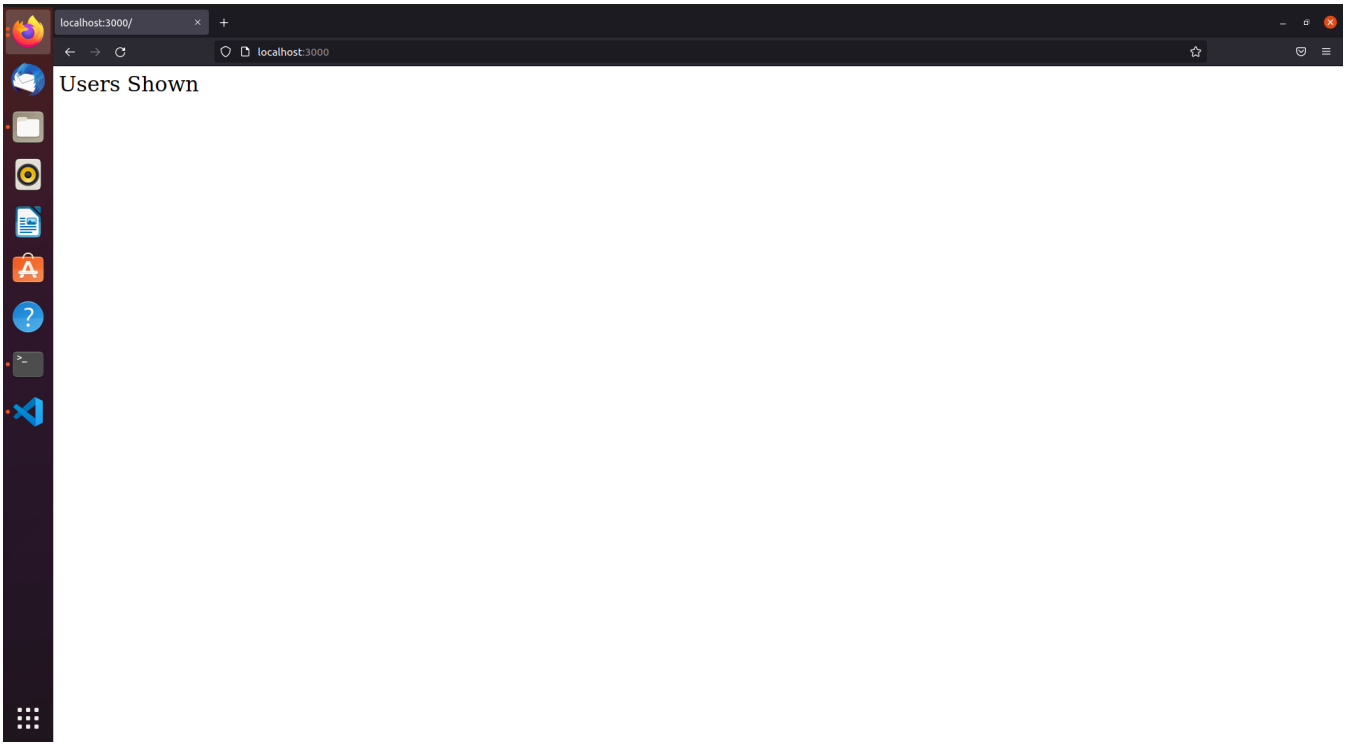


2.Package.json(containing project details and dependencies)

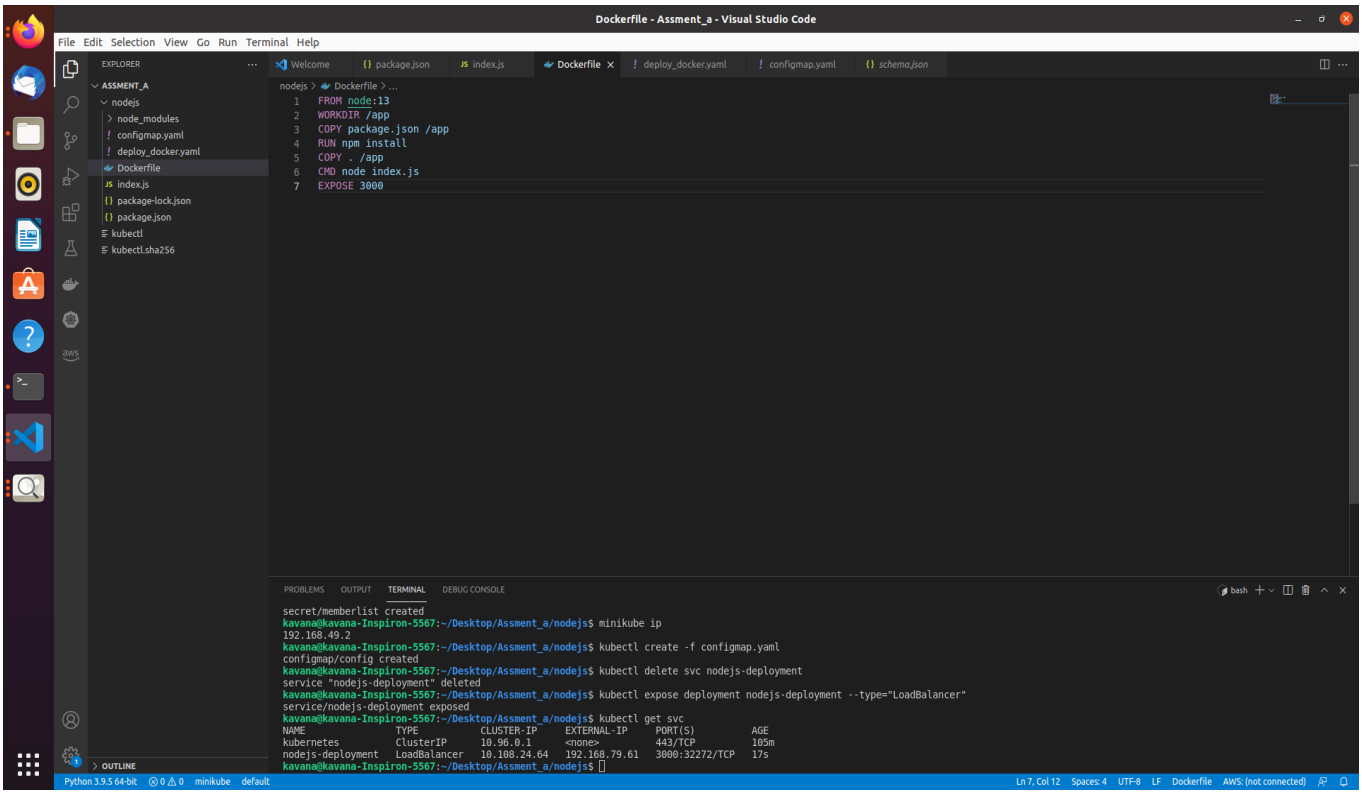


3. Test Node.js app (on local host)

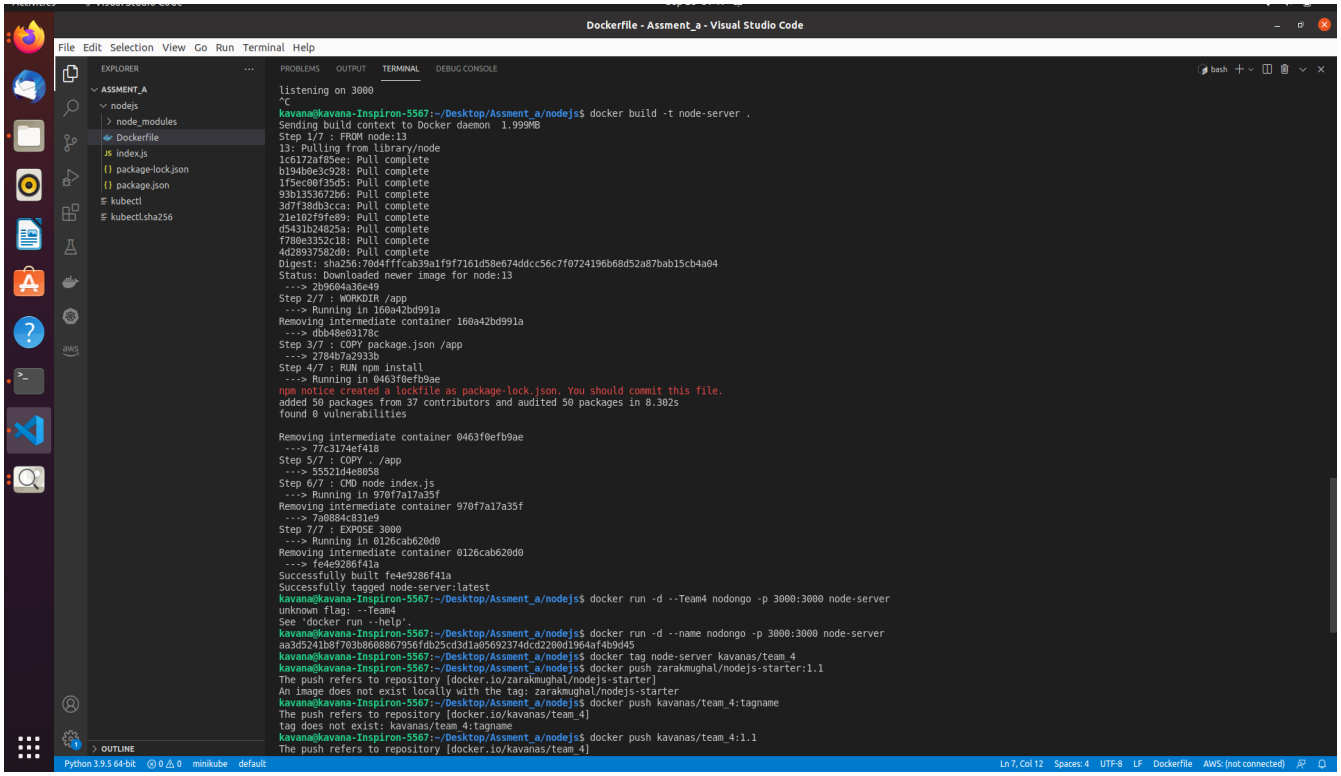




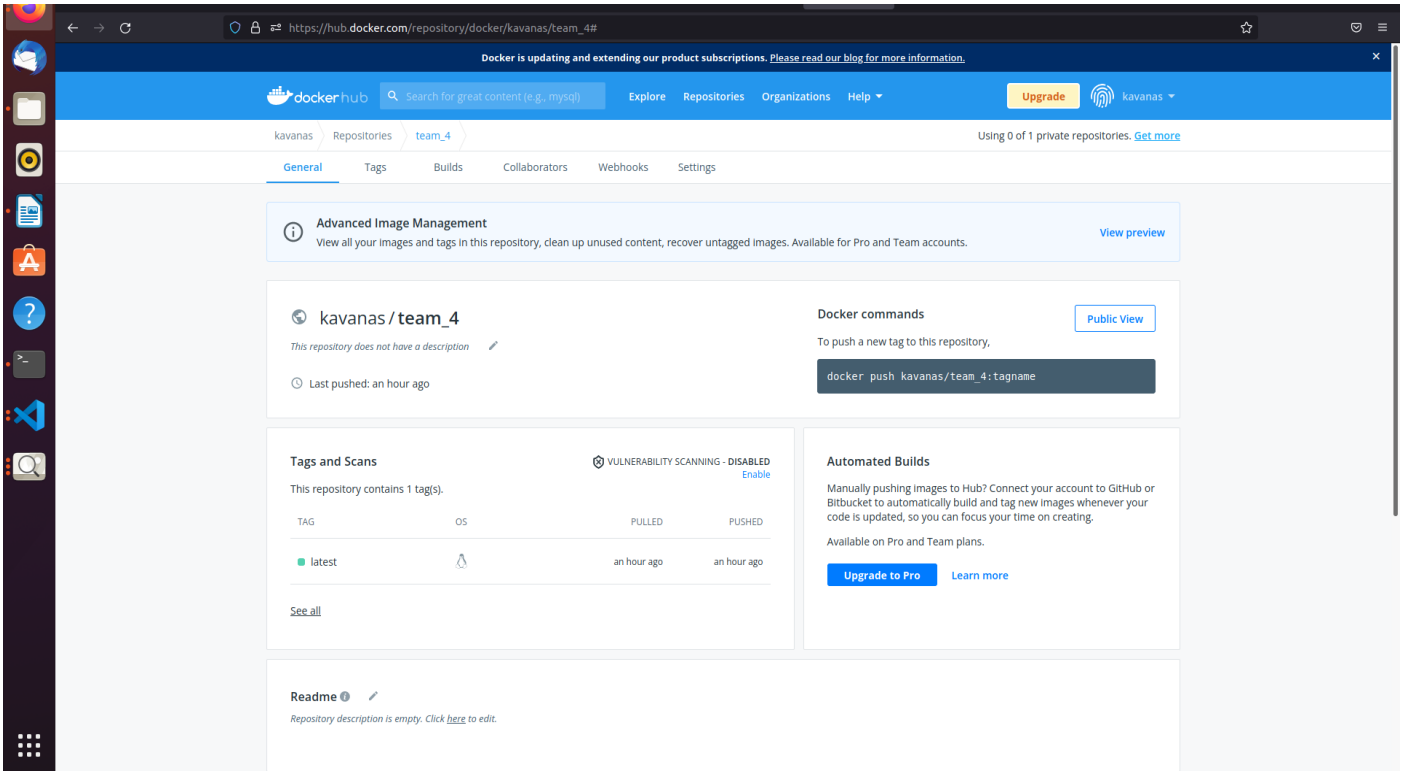
4.Dockerising node server creating a dockerfile

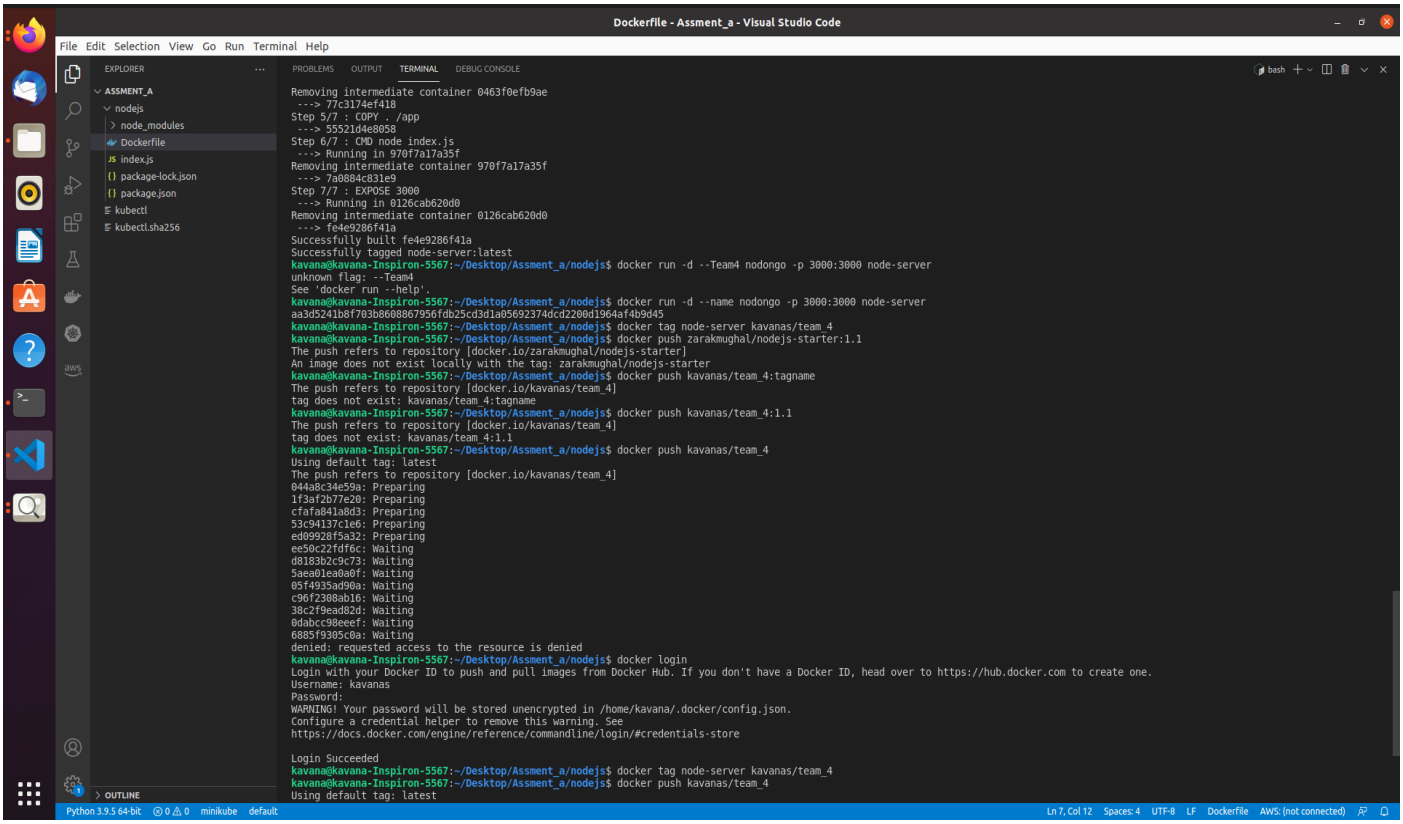


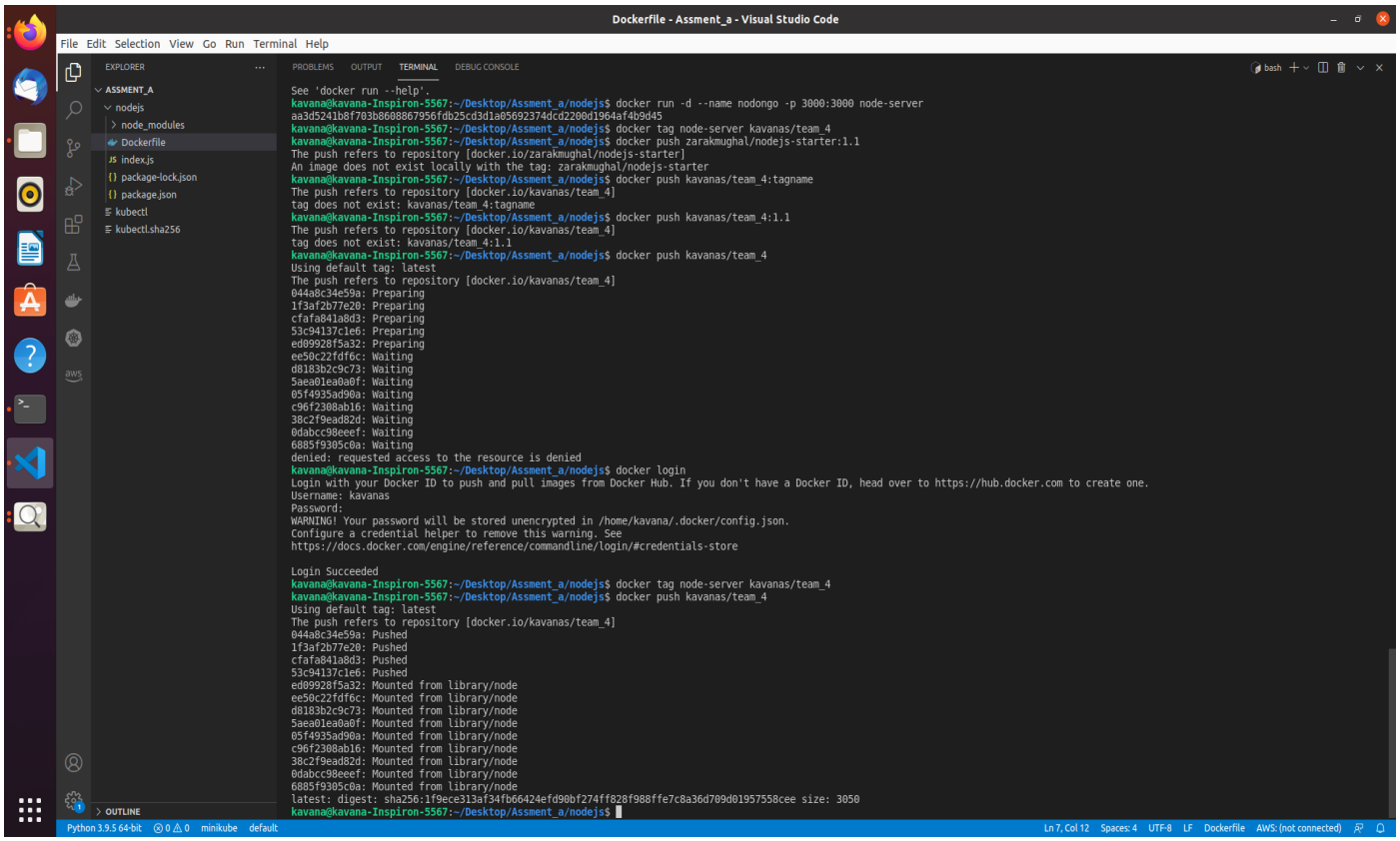
5.Building our image dockerfile and ,Creating and running the container



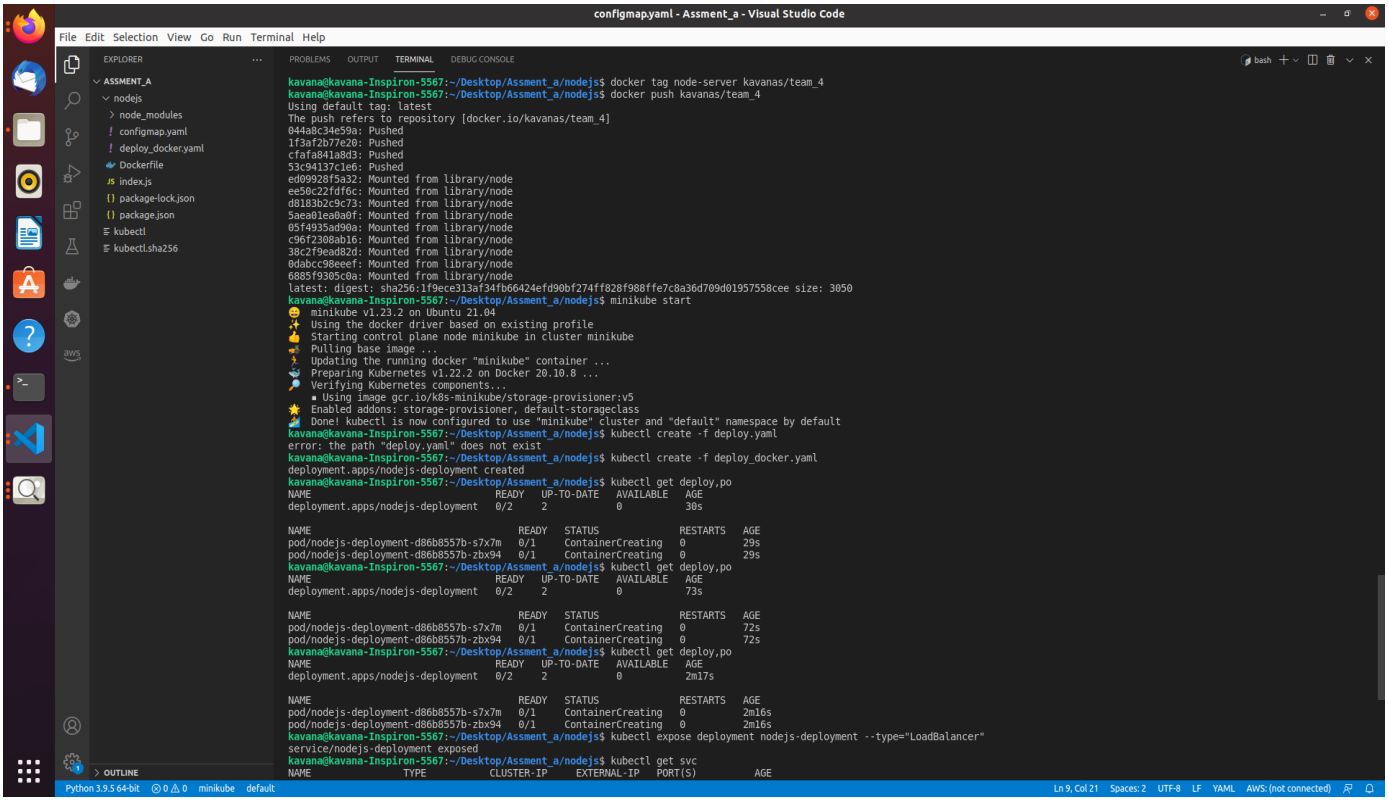
6.Uploading The Image To Docker Registry Docker Hub


https://hub.docker.com/repository/docker/kavanas/team_4#
Docker is updating and extending our product subscriptions. Please read our blog for more information.
dockerhub
Search for great content (e.g., mysql)
Explore
Repositories
Organizations
Help
Upgrade
kavanas
kavanas
Repositories
team_4
Using 0 of 1 private repositories. Get more
General
Tags
Builds
Collaborators
Webhooks
Settings
Advanced Image Management
View all your images and tags in this repository, clean up unused content, recover untagged images. Available for Pro and Team accounts.
View preview
kavanas / team_4
This repository does not have a description
Last pushed: an hour ago
Docker commands
Public View
To push a new tag to this repository,
docker push kavanas/team_4:tagname
Tags and Scans
VULNERABILITY SCANNING - DISABLED
Enable
This repository contains 1 tag(s).
TAG
OS
PULLED
PUSHED
latest
an hour ago
an hour ago
See all
Automated Builds
Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.
Available on Pro and Team plans.
Upgrade to Pro
Learn more
Readme
Repository description is empty. Click here to edit.

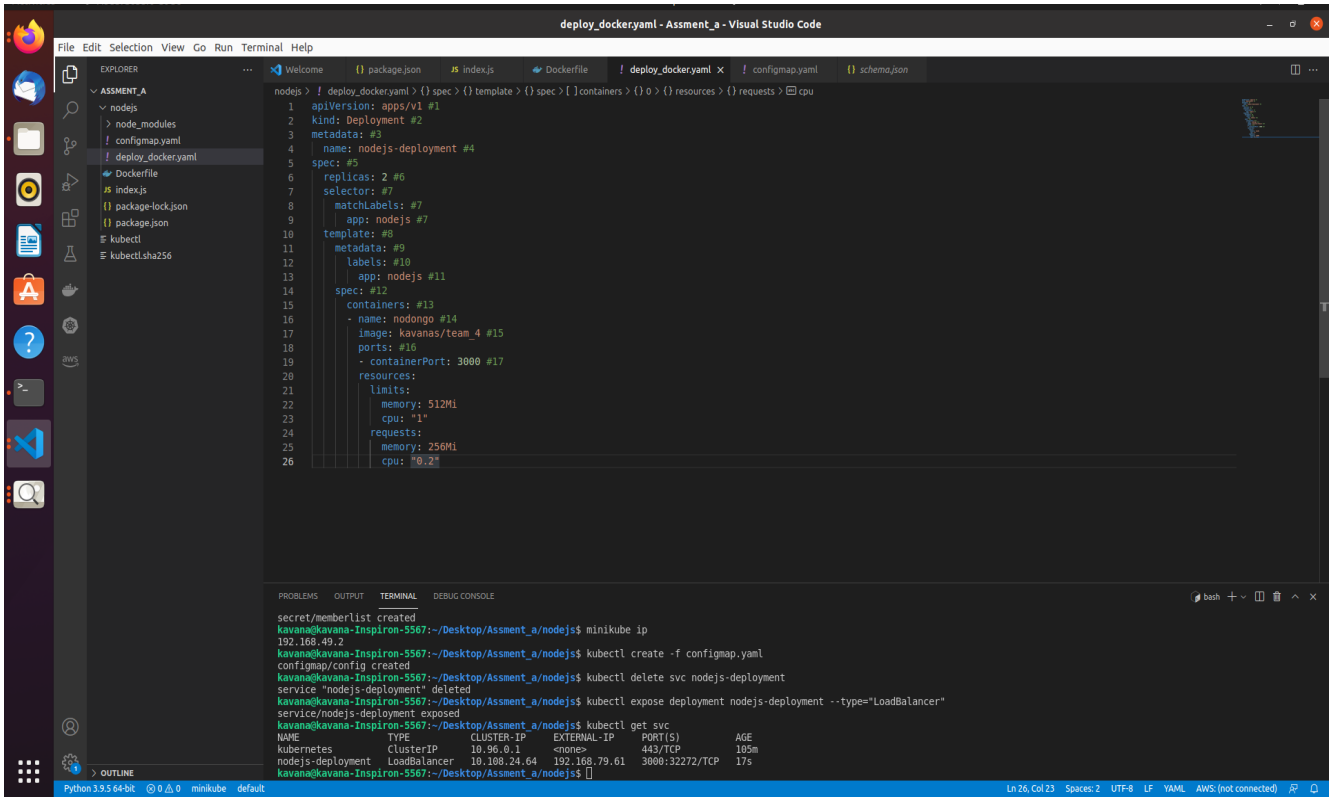

Dockerfile - Assment_a - Visual Studio Code
File Edit Selection View Go Run Terminal Help
EXPLORER
ASSMENT_A
nodejs
node_modules
Dockerfile
index.js
package-lock.json
package.json
kubectl
kubectl.sha256
PROBLEMS
OUTPUT
TERMINAL
DEBUG CONSOLE
bash
Removing intermediate container 0463f0efb9ae
---> 77c3174ef418
Step 5/7 : COPY . /app
---> 55521d4e8058
Step 6/7 : CMD node index.js
---> Running in 970f7a17a35f
Removing intermediate container 970f7a17a35f
---> 7a0884c831e9
Step 7/7 : EXPOSE 3000
---> Running in 0126cab620d0
Removing intermediate container 0126cab620d0
---> fe4e9286f41a
Successfully built fe4e9286f41a
Successfully tagged node-server:latest
kavana@kavana-Inspiron-5567:~/Desktop/Assment_a/nodejs$ docker run -d --Team4 nodongo -p 3000:3000 node-server
unknown flag: --Team4
See 'docker run --help'.
kavana@kavana-Inspiron-5567:~/Desktop/Assment_a/nodejs$ docker run -d --name nodongo -p 3000:3000 node-server
aa3d5241b8f703b8608867956fdb25cd3d1a05692374dcd2200d1964af4b9d45
kavana@kavana-Inspiron-5567:~/Desktop/Assment_a/nodejs$ docker tag node-server kavanas/team_4
kavana@kavana-Inspiron-5567:~/Desktop/Assment_a/nodejs$ docker push zarakmughal/nodejs-starter:1.1
The push refers to repository [docker.io/zarakmughal/nodejs-starter]
An image does not exist locally with the tag: zarakmughal/nodejs-starter
kavana@kavana-Inspiron-5567:~/Desktop/Assment_a/nodejs$ docker push kavanas/team_4:tagname
The push refers to repository [docker.io/kavanas/team_4]
tag does not exist: kavanas/team_4:tagname
kavana@kavana-Inspiron-5567:~/Desktop/Assment_a/nodejs$ docker push kavanas/team_4:1.1
The push refers to repository [docker.io/kavanas/team_4]
tag does not exist: kavanas/team_4:1.1
kavana@kavana-Inspiron-5567:~/Desktop/Assment_a/nodejs$ docker push kavanas/team_4
Using default tag: latest
The push refers to repository [docker.io/kavanas/team_4]
044a8c34e59a: Preparing
1f3af2b77e20: Preparing
cfafa841a8d3: Preparing
53c94137c1e6: Preparing
ed09928f5a32: Preparing
ee50c22fdf6c: Waiting
d8183b2c9c73: Waiting
5aea01ea0a0f: Waiting
05f4935ad90a: Waiting
c96f2308ab16: Waiting
38c2f9ead82d: Waiting
0dabcc98eeef: Waiting
6885f9305c0a: Waiting
denied: requested access to the resource is denied
kavana@kavana-Inspiron-5567:~/Desktop/Assment_a/nodejs$ docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.
Username: kavanas
Password:
WARNING! Your password will be stored unencrypted in /home/kavana/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store
Login Succeeded
kavana@kavana-Inspiron-5567:~/Desktop/Assment_a/nodejs$ docker tag node-server kavanas/team_4
kavana@kavana-Inspiron-5567:~/Desktop/Assment_a/nodejs$ docker push kavanas/team_4
Using default tag: latest
OUTLINE
Python 3.9.5 64-bit
0 0
minikube
default
Ln 7, Col 12
Spaces: 4
UTF-8
LF
Dockerfile
AWS: (not connected)

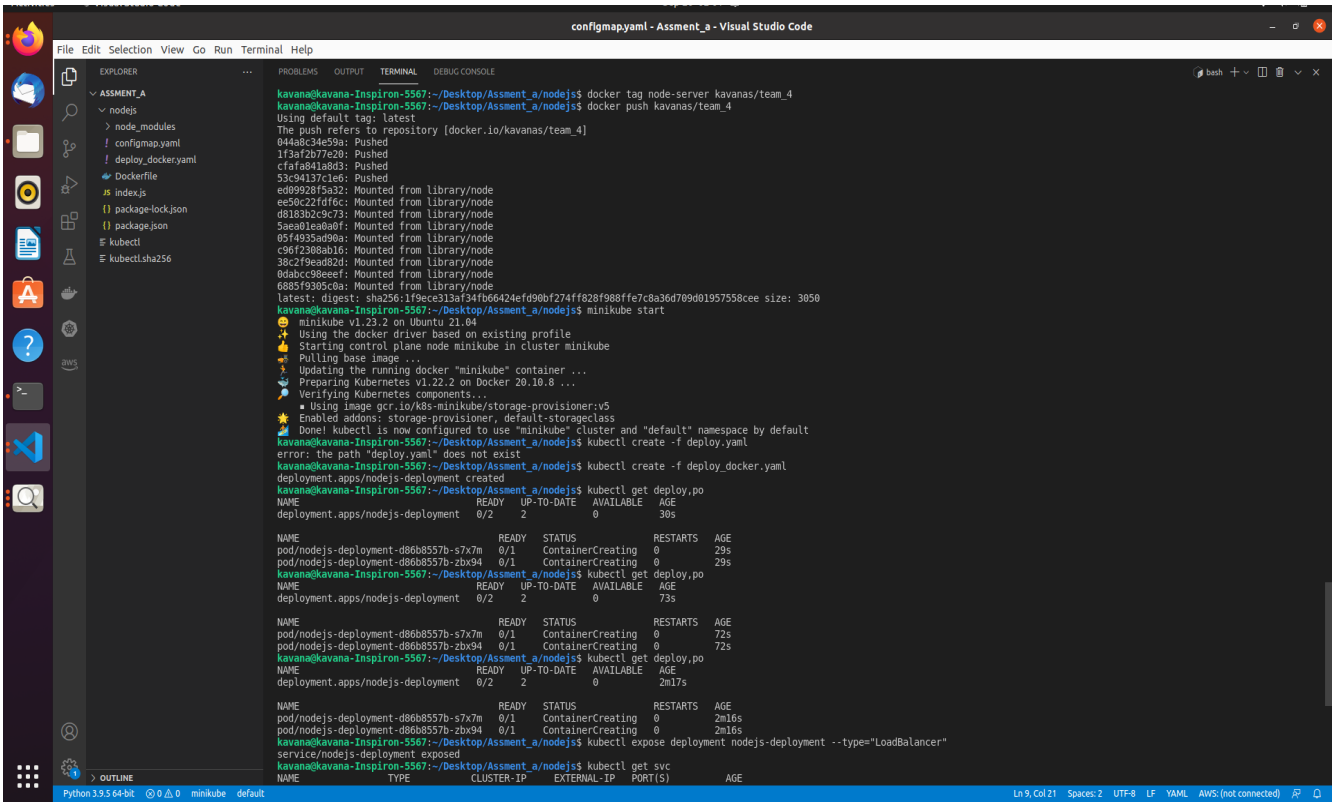


7.Starting The Kubernetes Cluster

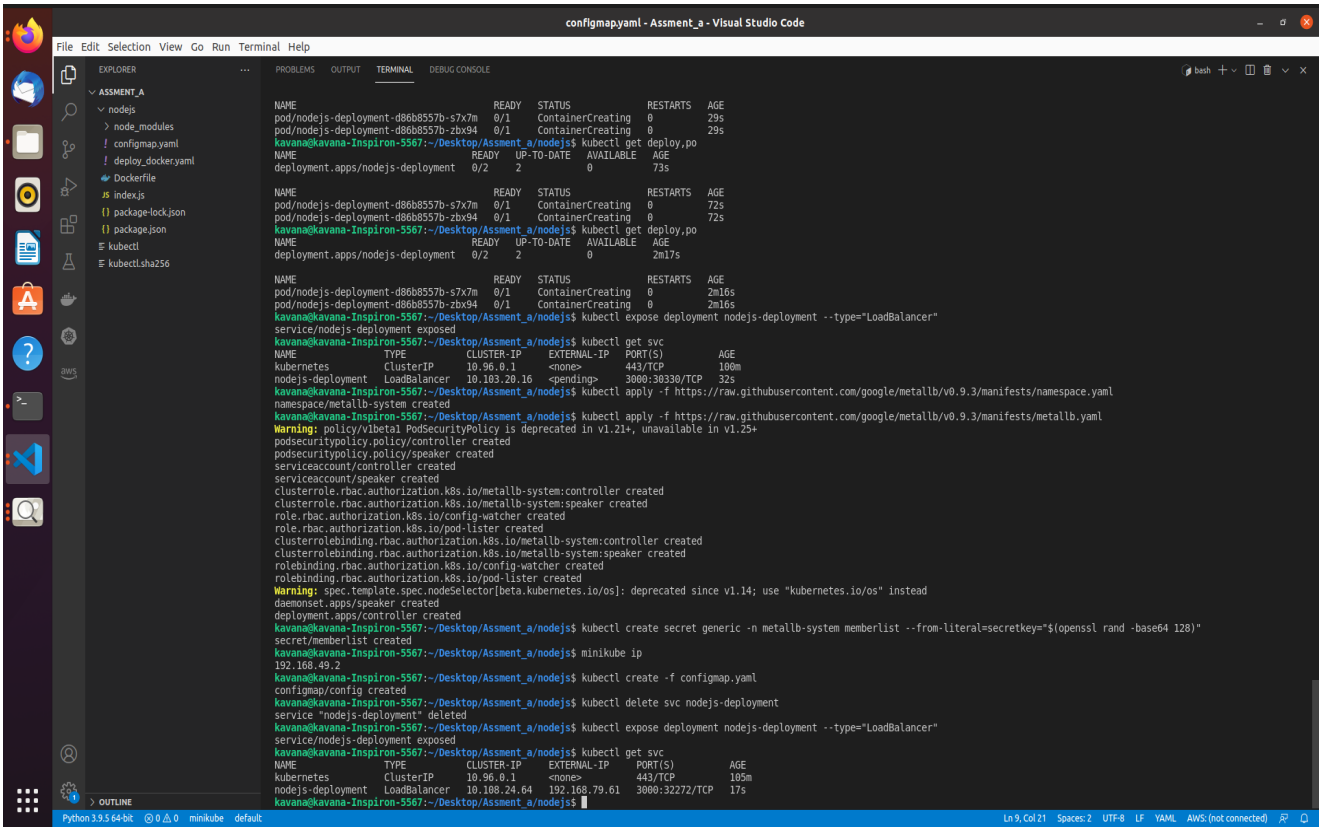


8.Writing yaml file to deploy into kubernete cluster

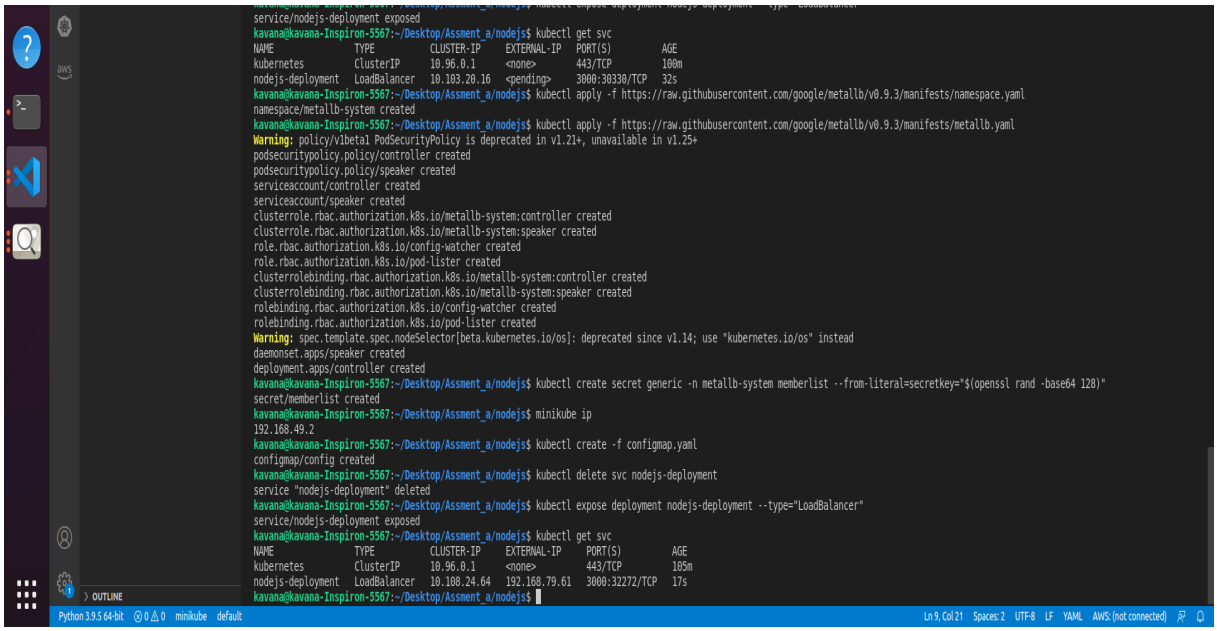




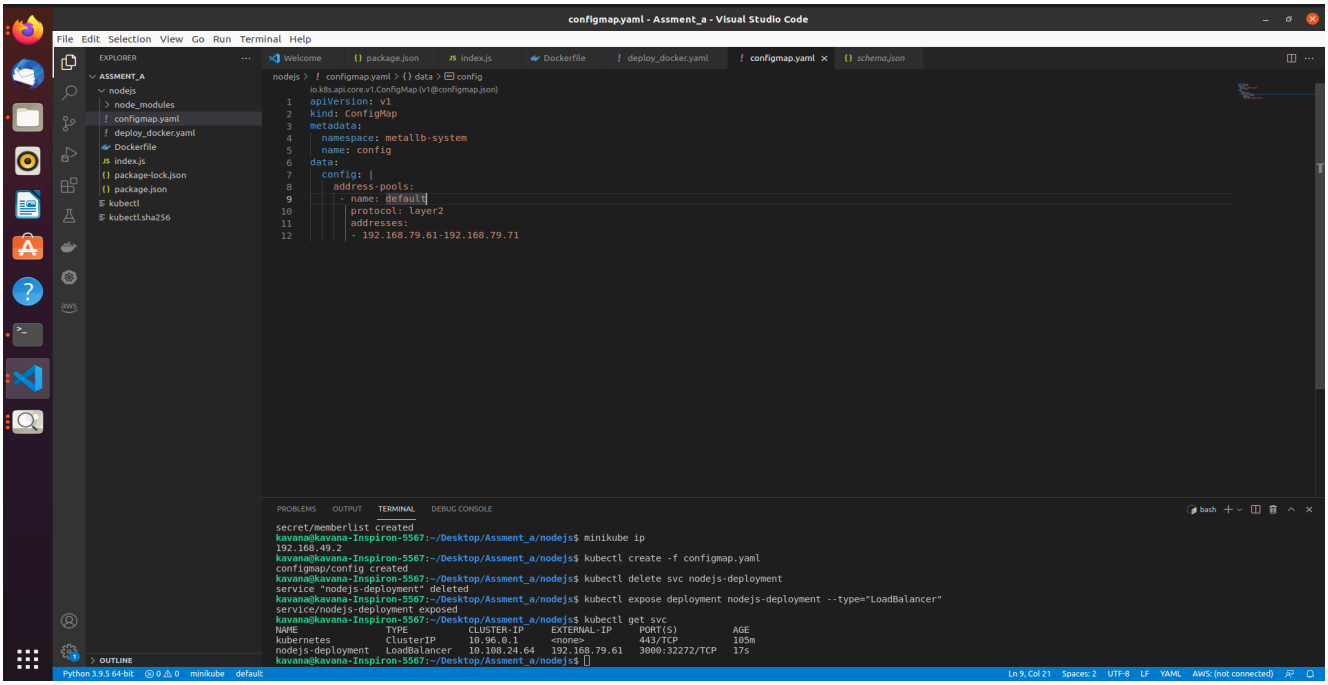
9.Exposing deployment to internet



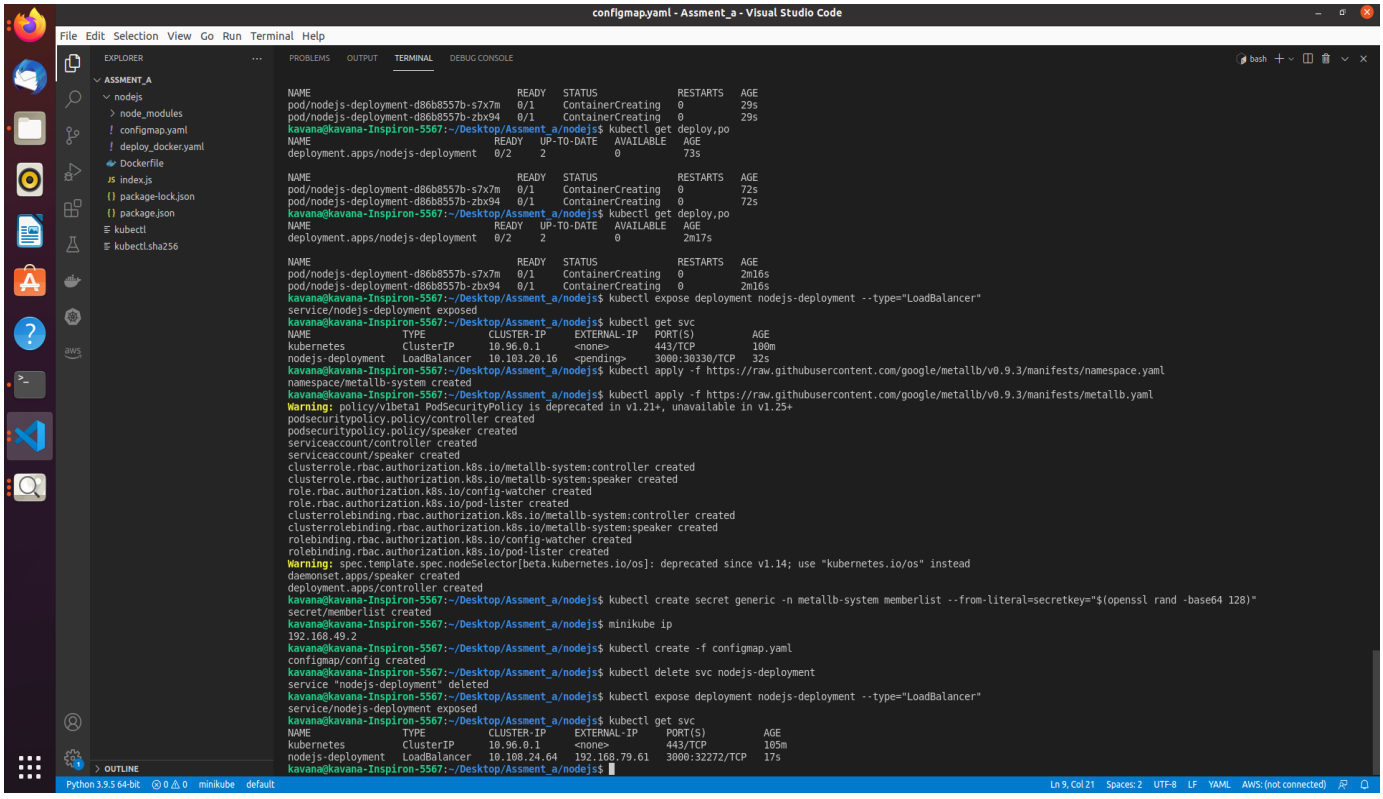
10.Commands to get external IP address



11.Creating a config map file for the address pool



12.Verifying External IP



codelink:https://github.com/KAVANA-S-SALUNKHE/Devop_assignment1-code-