



INDIAN INSTITUTE OF
INFORMATION
TECHNOLOGY

DevOps(DS457)

Assignment

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

Submitted to

Dr.Uma.S

Submitted by

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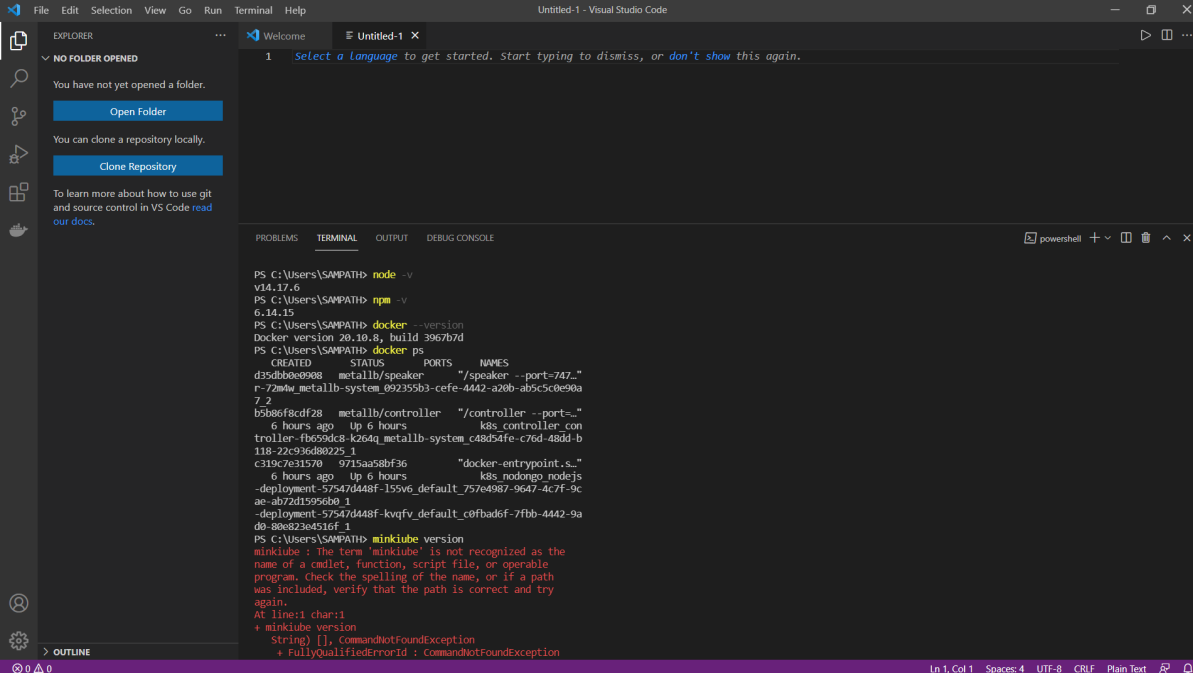
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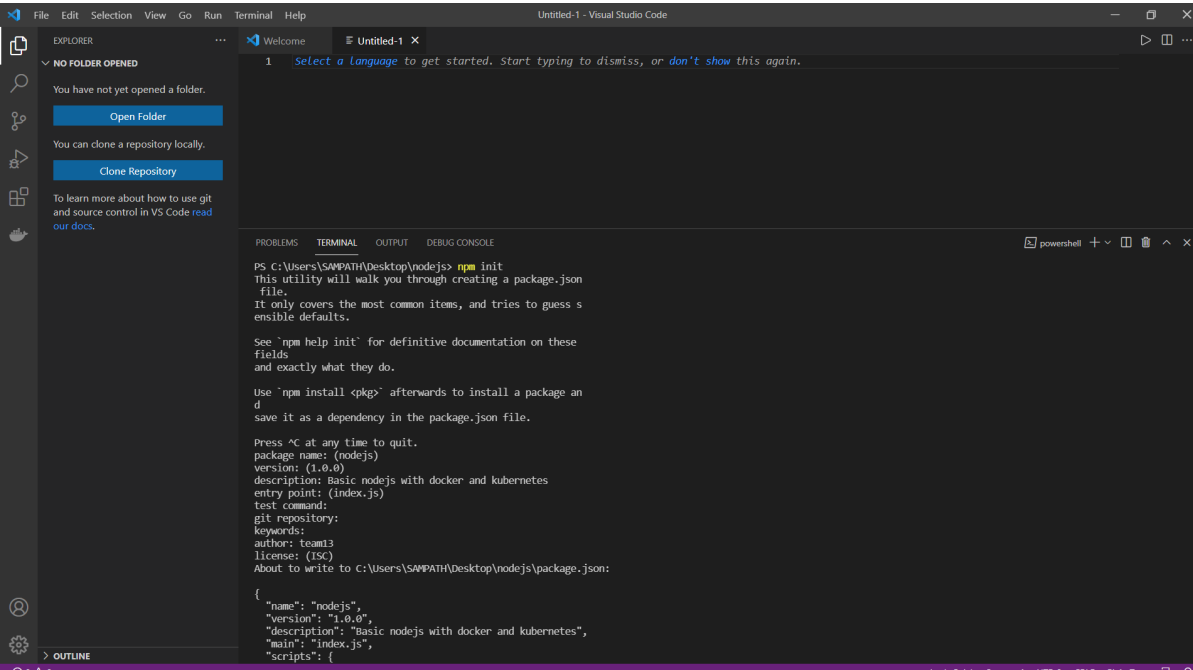
Assignment:1.2:

Installing and checking Node,npm,Docker,Kubernetes,Minikube:



```
PS C:\Users\SAMPATH> node -v
v14.17.6
PS C:\Users\SAMPATH> npm -v
6.14.15
PS C:\Users\SAMPATH> docker --version
Docker version 20.10.8, build 3967b7d
PS C:\Users\SAMPATH> docker ps
CONTAINER ID        STATUS               PORTS               NAMES
d35db0e0988        metallb/speaker      /speaker --port=747.
r-72mhw-metallb-system_092355b3-cefe-4442-a28b-ab9c5c0e90a
7 2
b5b86f8cdf28       metallb/controller   /controller --port=.
6 hours ago        Up 6 hours           k8s-controller-con
troller-fb859d88-k264q-metallb-system_c48d54fe-c76d-48dd-b
118-22c936d80225_1
c319c7e31570       9715aa58bf36         "docker-entrypoint.s
6 hours ago        Up 6 hours           k8s-nodongo-nodesj
-deployment-57547d448f-155v6-default_757e4987-9647-4c7f-9c
ae-ab72d1596d00_1
-deployment-57547d448f-kvqfv-default_c0fbad6f-7fbb-4442-9a
d0-80e823e4516f_1
PS C:\Users\SAMPATH> minikube version
minikube: The term 'minikube' is not recognized as the
name of a cmdlet, function, script file, or operable
program. Check the spelling of the name, or if a path
was included, verify that the path is correct and try
again.
At line:1 char:1
+ minikube version
+ ~~~~~
+ FullyQualifiedErrorId : CommandNotFoundException
```

Initialising node application and installing the express server:



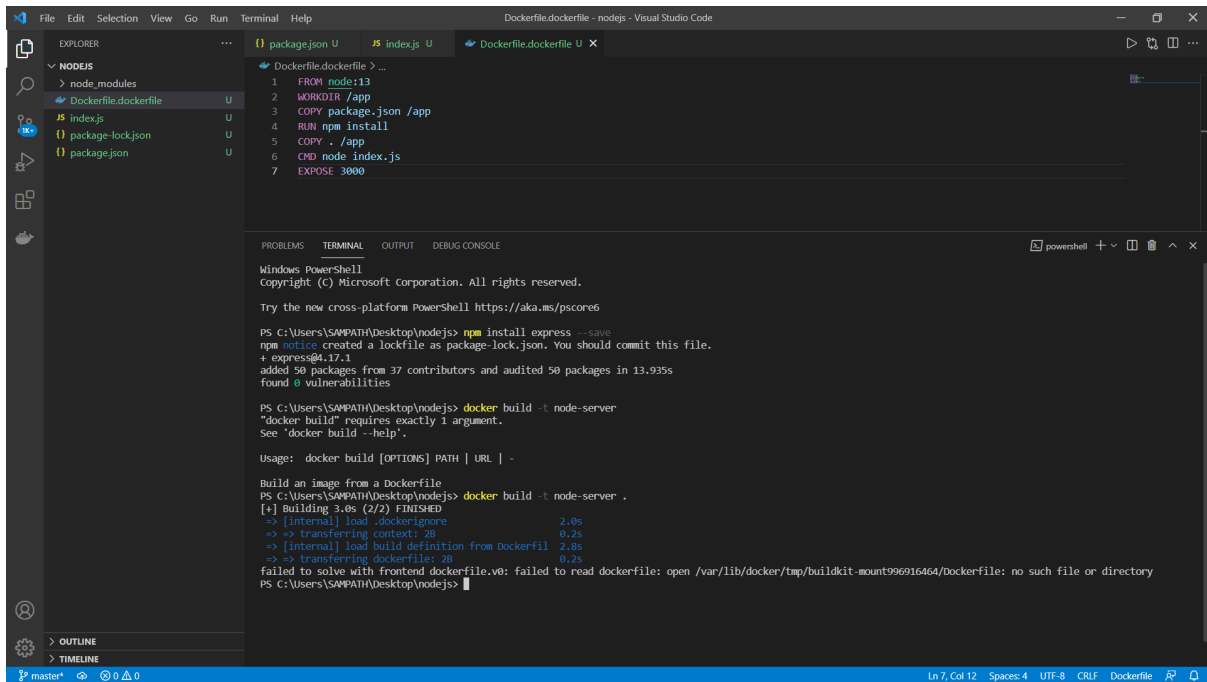
```
PS C:\Users\SAMPATH\Desktop\nodejs> npm init
This utility will walk you through creating a package.json
file.
It only covers the most common items, and tries to guess s
ensible defaults.

See 'npm help init' for definitive documentation on these
fields and exactly what they do.

Use 'npm install <pkg>' afterwards to install a package an
d
save it as a dependency in the package.json file.

Press ^C at any time to quit.
package name: (nodejs)
version: (1.0.0)
description: Basic nodejs with docker and kubernetes
entry point: (index.js)
test command:
git repository:
keywords:
author: team13
license: (ISC)
About to write to C:\Users\SAMPATH\Desktop\nodejs\package.json:

{
  "name": "nodejs",
  "version": "1.0.0",
  "description": "Basic nodejs with docker and kubernetes",
  "main": "index.js",
  "scripts": {
```

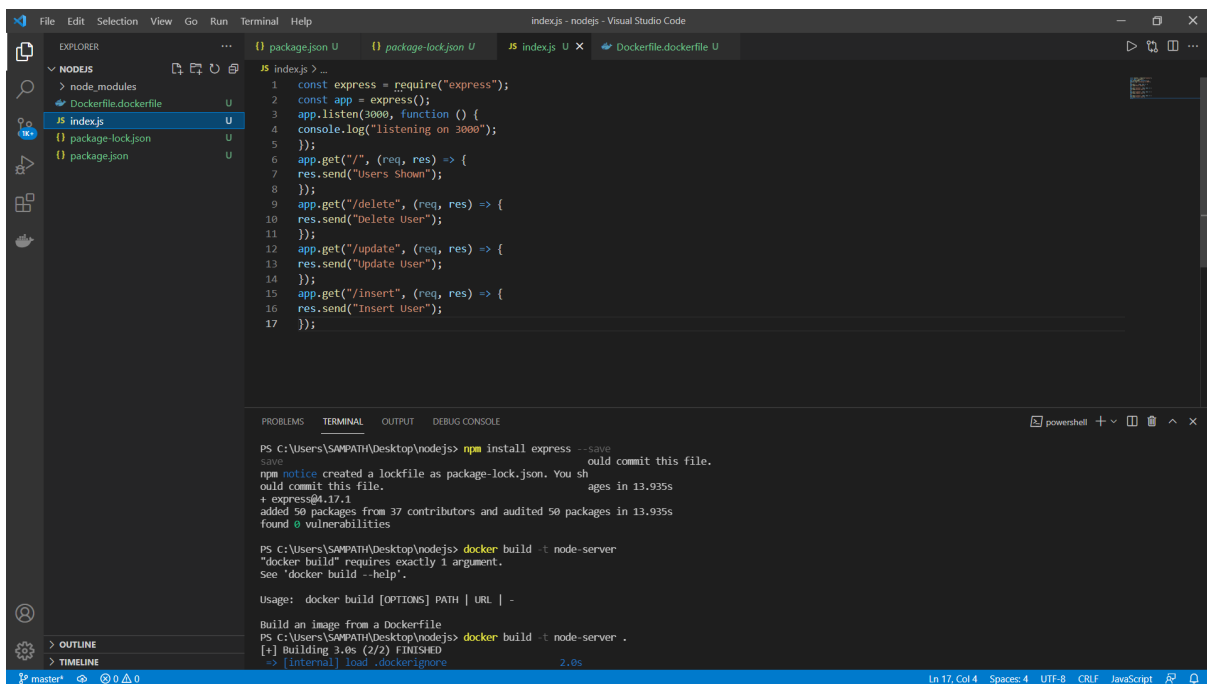


The screenshot shows the Visual Studio Code interface with a Dockerfile open in the editor. The Dockerfile contains the following instructions:

```
1 FROM node:13
2 WORKDIR /app
3 COPY package.json /app
4 RUN npm install
5 COPY . /app
6 CMD node index.js
7 EXPOSE 3000
```

The terminal window shows the output of the `npm install` and `docker build` commands. The `npm install` command successfully installed `express@4.17.1`. The `docker build` command failed with the error: `failed to solve with frontend dockerfile.v0: failed to read dockerfile: open /var/lib/docker/tmp/buildkit-mount996916464/Dockerfile: no such file or directory`.

Configuring the application:

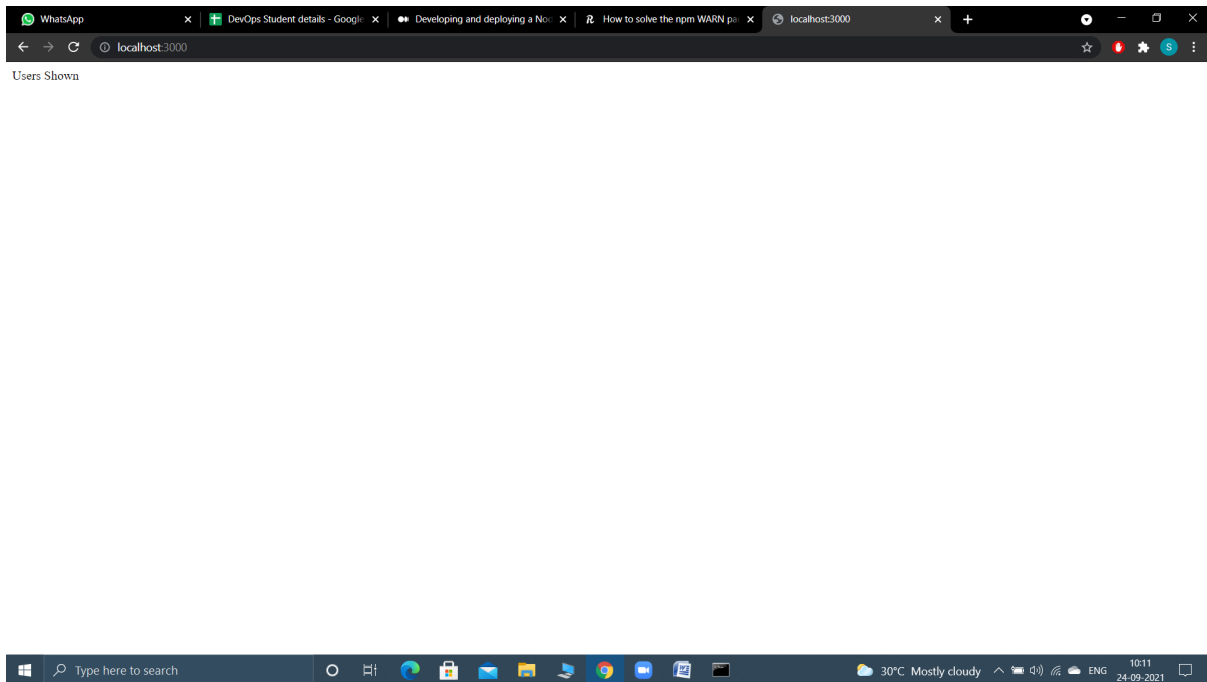


The screenshot shows the Visual Studio Code interface with the `index.js` file open in the editor. The `index.js` file contains the following code:

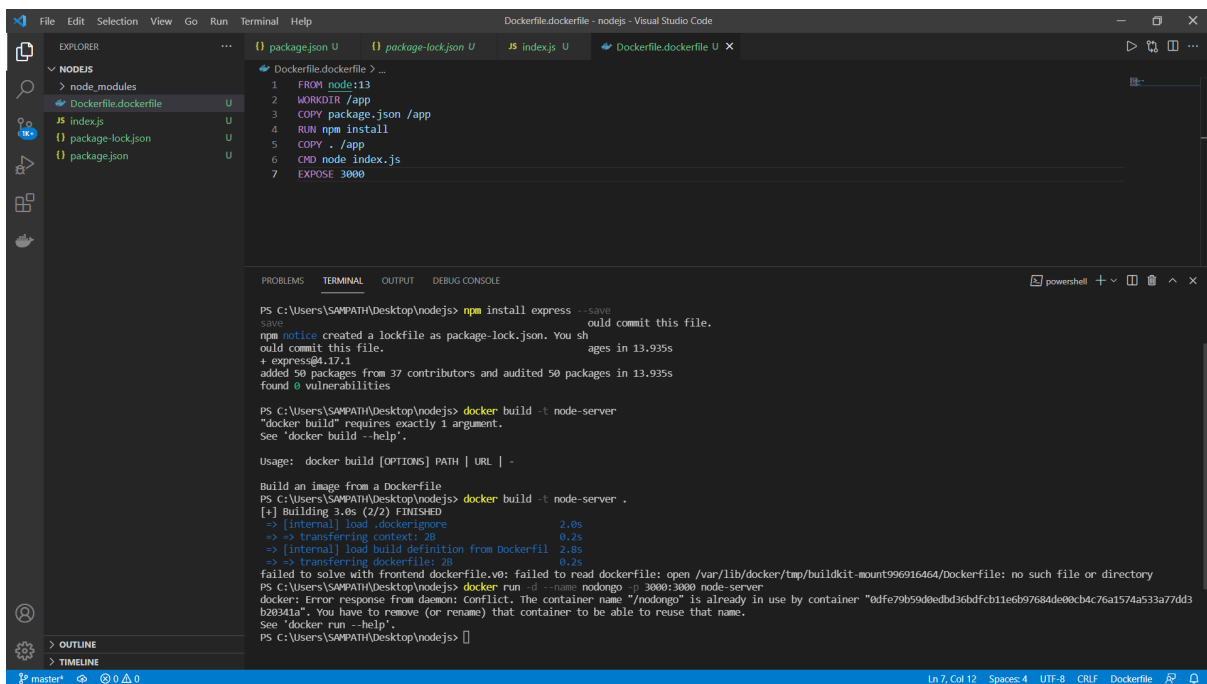
```
1 const express = require("express");
2 const app = express();
3 app.listen(3000, function () {
4   console.log("listening on 3000");
5 });
6 app.get("/", (req, res) => {
7   res.send("Users Shown");
8 });
9 app.get("/delete", (req, res) => {
10  res.send("Delete User");
11 });
12 app.get("/update", (req, res) => {
13  res.send("Update User");
14 });
15 app.get("/insert", (req, res) => {
16  res.send("Insert User");
17 });
```

The terminal window shows the output of the `npm install` and `docker build` commands. The `npm install` command successfully installed `express@4.17.1`. The `docker build` command failed with the error: `failed to solve with frontend dockerfile.v0: failed to read dockerfile: open /var/lib/docker/tmp/buildkit-mount996916464/Dockerfile: no such file or directory`.

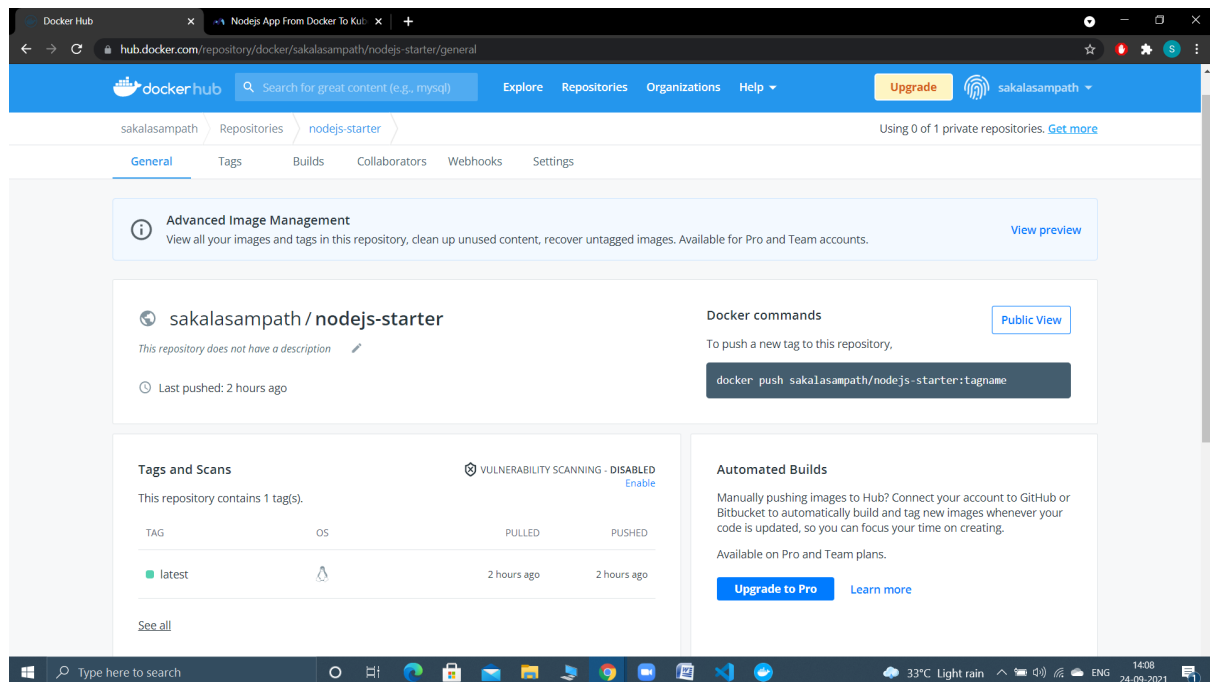
Nodejs web app by browsing localhost:3000/



Dockerizing the node-server and building the image:

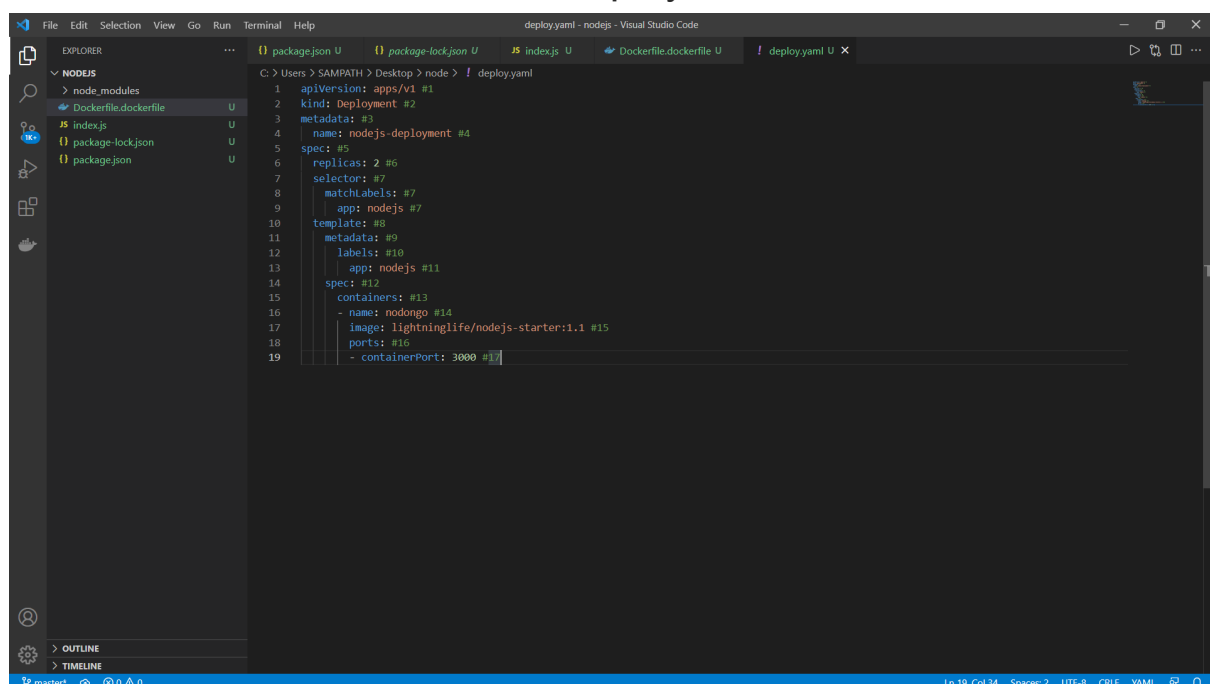


Create and Run the container and then upload the image to docker registry Docker-hub



Start the kubernetes cluster using command:\$ minikube start

Define YAML File To Create A Deployment In Kubernetes Cluster



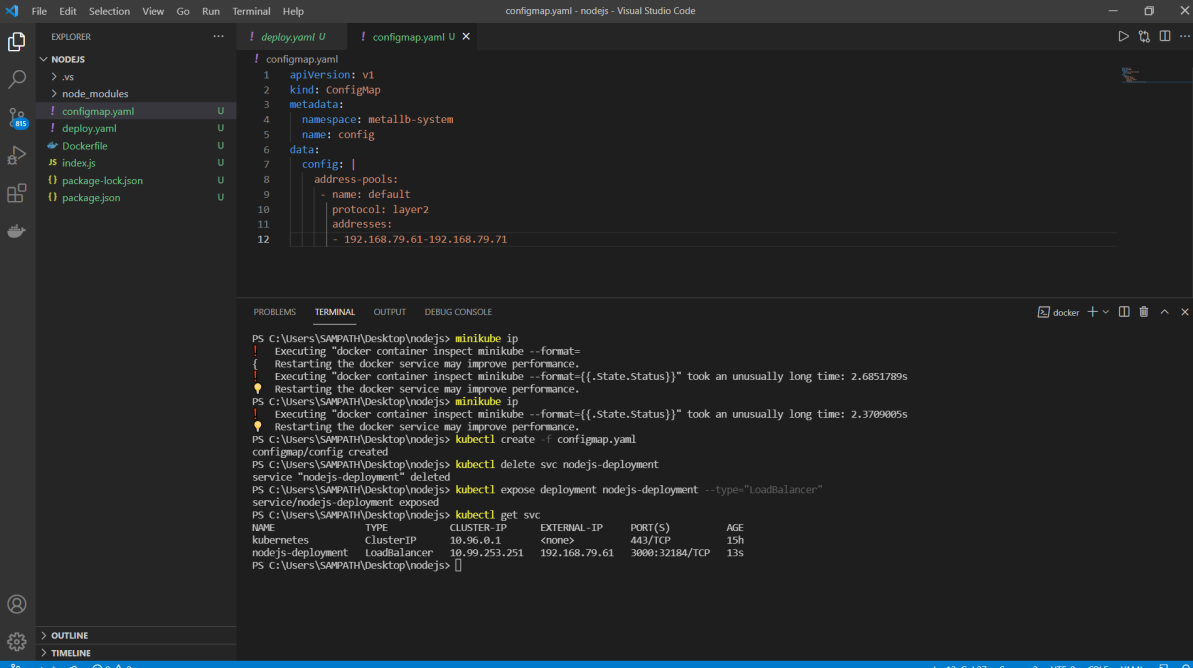
Creating Deployment in Kubernete cluster by using command:

```
$ kubectl create -f deploy.yaml
```

Expose Deployment to Internet:

```
$ kubectl expose deployment nodejs-deployment --type="LoadBalancer"
```

Using MetalLB in Minikube environment and create a config map for the address pool:

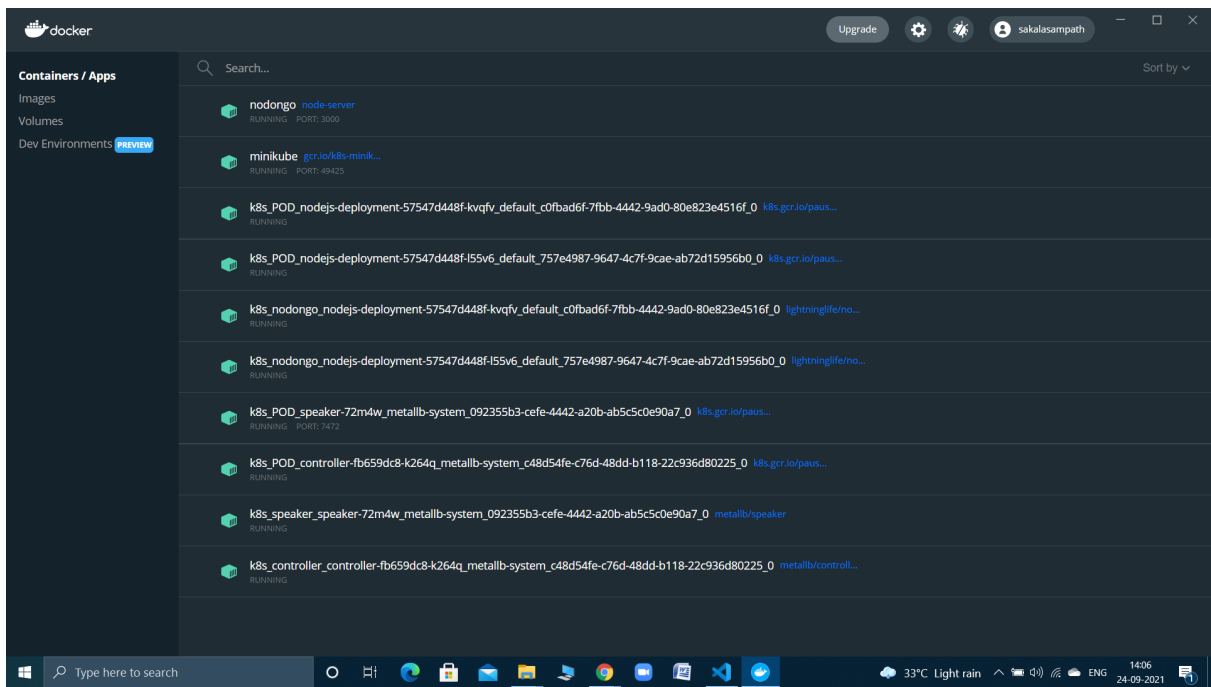
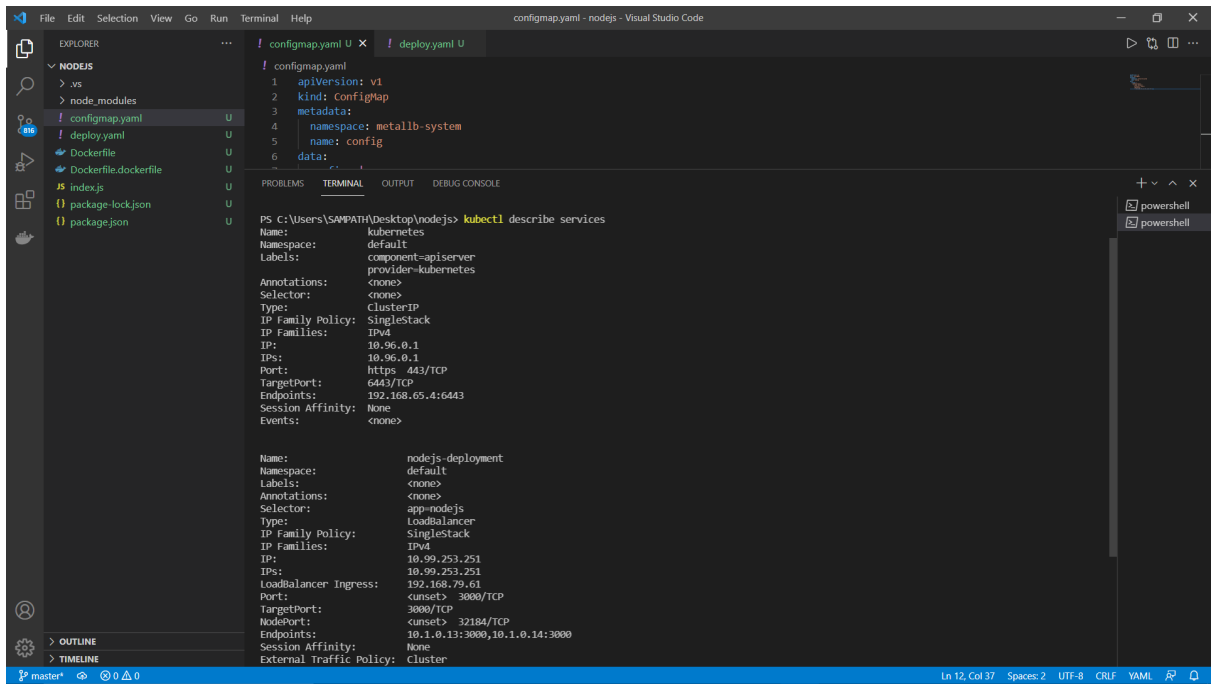


The screenshot shows a Visual Studio Code editor with a terminal window open. The terminal displays the following commands and output:

```
PS C:\Users\SAMPATH\Desktop\nodejs> minikube ip
! Executing "docker container inspect minikube --format=
Restarting the docker service may improve performance.
! Executing "docker container inspect minikube --format={{.State.Status}}" took an unusually long time: 2.6851789s
! Restarting the docker service may improve performance.
PS C:\Users\SAMPATH\Desktop\nodejs> minikube ip
! Executing "docker container inspect minikube --format={{.State.Status}}" took an unusually long time: 2.3709005s
! Restarting the docker service may improve performance.
PS C:\Users\SAMPATH\Desktop\nodejs> kubectl create -f configmap.yaml
configmap/config created
PS C:\Users\SAMPATH\Desktop\nodejs> kubectl delete svc nodejs-deployment
service "nodejs-deployment" deleted
PS C:\Users\SAMPATH\Desktop\nodejs> kubectl expose deployment nodejs-deployment --type="LoadBalancer"
service/nodejs-deployment exposed
PS C:\Users\SAMPATH\Desktop\nodejs> kubectl get svc
NAME                TYPE                CLUSTER-IP      EXTERNAL-IP      PORT(S)          AGE
kubernetes          ClusterIP           10.96.0.1        <none>            443/TCP          15h
nodejs-deployment   LoadBalancer       10.99.253.251    192.168.79.61    3000:32184/TCP   13s
PS C:\Users\SAMPATH\Desktop\nodejs> []
```

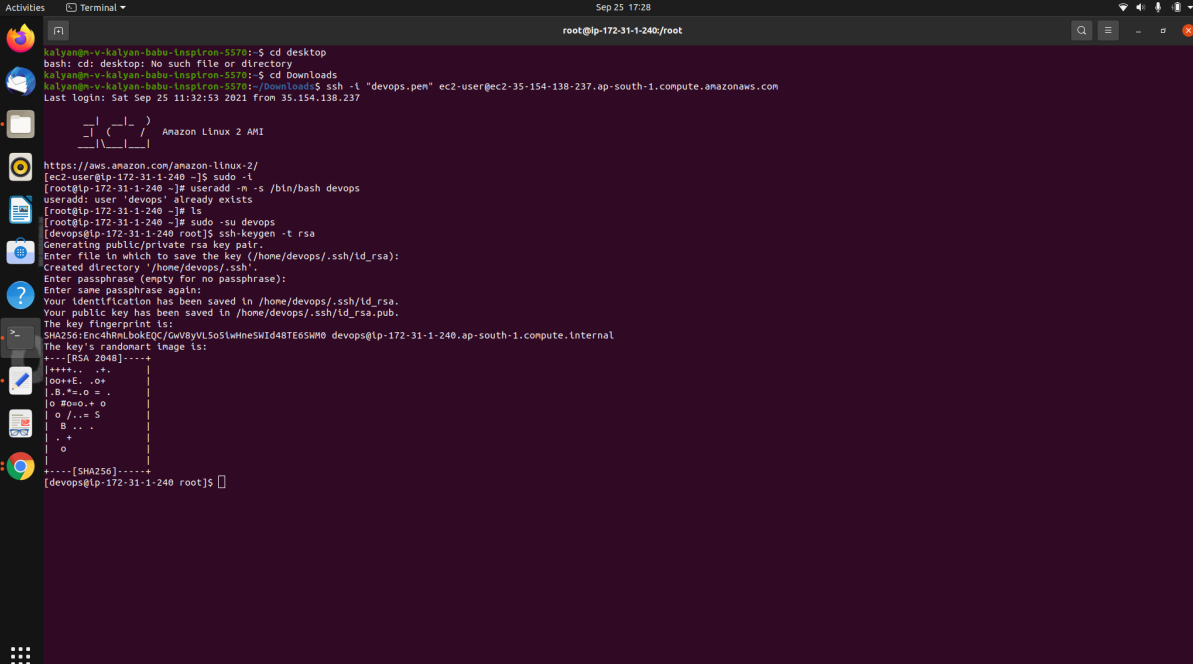
The editor also shows a file named `configmap.yaml` with the following content:

```
! configmap.yaml
1  apiVersion: v1
2  kind: ConfigMap
3  metadata:
4    namespace: metallb-system
5    name: config
6  data:
7    config: |
8      address-pools:
9        - name: default
10         protocol: layer2
11         addresses:
12         - 192.168.79.61-192.168.79.71
```



Task 3:

1. Creating Devops User and Generating SSH Key.



```
kaliyann-v-kalyan-babu-Instpro-5578:~$ cd desktop
bash: cd: desktop: No such file or directory
kaliyann-v-kalyan-babu-Instpro-5578:~$ cd Downloads
kaliyann-v-kalyan-babu-Instpro-5578:~/Downloads$ ssh -t "devops.pen" ec2-user@ec2-35-154-138-237.ap-south-1.compute.amazonaws.com
Last login: Sat Sep 25 11:32:53 2021 from 35.154.138.237

Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-1-240 ~]$ sudo -i
[root@ip-172-31-1-240 ~]# useradd -n -s /bin/bash devops
useradd: user 'devops' already exists
[root@ip-172-31-1-240 ~]# ls
[root@ip-172-31-1-240 ~]# sudo -su devops
[devops@ip-172-31-1-240 root]$ ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/home/devops/.ssh/id_rsa):
Created directory '/home/devops/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/devops/.ssh/id_rsa.
Your public key has been saved in /home/devops/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:EncdHMLbQEQ/Gw8yVLS05WheSWId48TE6SWM0 devops@ip-172-31-1-240.ap-south-1.compute.internal
The key's randomart image is:
+--[RSA 2048]-----
|
|oo++E. .o+
|.B.*.=.o =
|o Rooo.o
|o /..= S
|B...
|..+
|o
+-----[SHA256]-----
[devops@ip-172-31-1-240 root]$
```

2. How to Run a Playbook

- You need to provide the user `ec2-user` and the key to connect to the remote host.
- I am assuming all the remote hosts have same keys
- You need to use the `.pem` file to connect initially
- PEM file need to have specific permission before you can use it directly. If the permission is not set properly you will see the error “It is required that your private key files are NOT accessible by others. This private key will be ignored.”


```
Activities Terminal Sep 25 18:05
root@ip-172-31-1-240:~/Ansible-Sample-Application-Deployment

TASK [include_role : tomcat] *****
TASK [tomcat : Install Java 1.7] *****
changed: [172.31.8.178]
TASK [add group "tomcat"] *****
changed: [172.31.8.178]
TASK [add user "tomcat"] *****
changed: [172.31.8.178]
TASK [tomcat : Download Tomcat] *****
changed: [172.31.8.178]
TASK [tomcat : Extract archive] *****
[WARNING]: Consider using the unarchive module rather than running "tar". If you need to use command because unarchive is insufficient you can add 'warn: false' to this command task or set 'command_warnings=False' in ansible.cfg to get rid of this message.
changed: [172.31.8.178]
TASK [tomcat : Symlink install directory] *****
changed: [172.31.8.178]
TASK [tomcat : Change ownership of Tomcat installation] *****
changed: [172.31.8.178]
TASK [tomcat : Configure Tomcat server] *****
changed: [172.31.8.178]
TASK [tomcat : Configure Tomcat users] *****
changed: [172.31.8.178]
TASK [tomcat : Create sample directory] *****
changed: [172.31.8.178]
TASK [tomcat : copy sample index.html file] *****
changed: [172.31.8.178]
TASK [tomcat : Install Tomcat init script] *****
changed: [172.31.8.178]
TASK [tomcat : Start Tomcat] *****
[WARNING]: The service (tomcat) is actually an init script but the system is managed by systemd
changed: [172.31.8.178]
TASK [wait for tomcat to start] *****
ok: [172.31.8.178]
RUNNING HANDLER [restart tomcat] *****
changed: [172.31.8.178]
PLAY RECAP *****
172.31.8.178 : ok=21 changed=17 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0
[devops@ip-172-31-1-240 Ansible-Sample-Application-Deployment]$
```

3.You can see that I am executing an `id` command with SSH connection and using my(Devops) private key file to login without password.

```
Activities Terminal Sep 25 18:09
root@ip-172-31-1-240:~/Ansible-Sample-Application-Deployment

TASK [add group "tomcat"] *****
changed: [172.31.8.178]
TASK [add user "tomcat"] *****
changed: [172.31.8.178]
TASK [tomcat : Download Tomcat] *****
changed: [172.31.8.178]
TASK [tomcat : Extract archive] *****
[WARNING]: Consider using the unarchive module rather than running "tar". If you need to use command because unarchive is insufficient you can add 'warn: false' to this command task or set 'command_warnings=False' in ansible.cfg to get rid of this message.
changed: [172.31.8.178]
TASK [tomcat : Symlink install directory] *****
changed: [172.31.8.178]
TASK [tomcat : Change ownership of Tomcat installation] *****
changed: [172.31.8.178]
TASK [tomcat : Configure Tomcat server] *****
changed: [172.31.8.178]
TASK [tomcat : Configure Tomcat users] *****
changed: [172.31.8.178]
TASK [tomcat : Create sample directory] *****
changed: [172.31.8.178]
TASK [tomcat : copy sample index.html file] *****
changed: [172.31.8.178]
TASK [tomcat : Install Tomcat init script] *****
changed: [172.31.8.178]
TASK [tomcat : Start Tomcat] *****
[WARNING]: The service (tomcat) is actually an init script but the system is managed by systemd
changed: [172.31.8.178]
TASK [wait for tomcat to start] *****
ok: [172.31.8.178]
RUNNING HANDLER [restart tomcat] *****
changed: [172.31.8.178]
PLAY RECAP *****
172.31.8.178 : ok=21 changed=17 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[devops@ip-172-31-1-240 Ansible-Sample-Application-Deployment]$ ssh -p -i ./ssh/id_rsa devops@172.31.8.178 "id devops && id devops"
Bad port '-i'
[devops@ip-172-31-1-240 Ansible-Sample-Application-Deployment]$ ssh -i ./ssh/id_rsa devops@172.31.8.178 "id devops && id devops"
Warning: Identity file /home/devops/ssh/id_rsa not accessible: No such file or directory.
uid=1001(devops) gid=1001(devops) groups=1001(devops)
uid=1001(devops) gid=1001(devops) groups=1001(devops)
[devops@ip-172-31-1-240 Ansible-Sample-Application-Deployment]$
```

Task.2.2:

1. Validate if a line or string present or not.

```
Activities Terminal Sep 29 19:19 sssss@sssss-Vostro-3578 ~
sssss@sssss-Vostro-3578:~$ cat hello.txt
hello world
this is team13
Task 4
assignment is to work with add,modify,delete,replace a string in line
sampath

sssss@sssss-Vostro-3578:~$ cat ex1.yml
---
- name: Examples of lineinfile
  hosts: localhost

  tasks:
    - name: "Example1: Validate if a String or line is present in the file"
      become: yes
      become_user: sssss
      tags: example1
      lineinfile:
        path: /home/sssss/hello.txt
        line: "Task 4"
        state: present
      backup: yes
      check_mode: yes
      register: example1out

sssss@sssss-Vostro-3578:~$ ansible localhost -m shell -a "grep -i tasks /home/sssss/hello.txt" -i ansible_hosts
[WARNING]: Unable to parse /home/sssss/ansible_hosts as an inventory source
[WARNING]: No inventory was parsed, only implicit localhost is available
localhost | FAILED | rc=1 >>
Don't see return code

sssss@sssss-Vostro-3578:~$ ansible localhost -m shell -a "grep -i Task /home/sssss/hello.txt" -i ansible_hosts
[WARNING]: Unable to parse /home/sssss/ansible_hosts as an inventory source
[WARNING]: No inventory was parsed, only implicit localhost is available
localhost | CHANGED | rc=0 >>
Task 4
sssss@sssss-Vostro-3578:~$
```

2. Validate if a string or line is present in file and add if not exists.

```
Activities Terminal Sep 29 19:22 sssss@sssss-Vostro-3578 ~
sssss@sssss-Vostro-3578:~$ nano hello.txt
sssss@sssss-Vostro-3578:~$ cat hello.txt
hello world
this is team13
Task 4
assignment is to work with add,modify,delete,replace a string in line
sampath

sssss@sssss-Vostro-3578:~$ nano ex2.yml
sssss@sssss-Vostro-3578:~$ cat ex2.yml
---
- name: Examples of lineinfile
  hosts: localhost

  tasks:
    - name: "Example2: Add the line if it does not exist"
      become: yes
      become_user: sssss
      tags: example2
      lineinfile:
        path: /home/sssss/hello.txt
        line: "IBBC5087"
        state: present
      backup: yes
      register: example2out

sssss@sssss-Vostro-3578:~$ ansible-playbook ex2.yml --ask-vault-pass
Vault password:
[WARNING]: provided hosts list is empty, only localhost is available. Note that
the implicit localhost does not match 'all'

PLAY [Examples of lineinfile] *****
TASK [Gathering Facts] *****
ok: [localhost]

TASK [Example2: Add the line if it does not exist] *****
changed: [localhost]

PLAY RECAP *****
localhost : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

sssss@sssss-Vostro-3578:~$ cat hello.txt
hello world
this is team13
Task 4
assignment is to work with add,modify,delete,replace a string in line
sampath
IBBC5087
sssss@sssss-Vostro-3578:~$ echo "Line is add at last"
Line is add at last
sssss@sssss-Vostro-3578:~$
```

3.Replacing a line in the file.

```
Activities Terminal Sep 29 19:26
sssss@sssss-Vostro-3578: ~
sssss@sssss-Vostro-3578:~$ cat hello.txt
hello world
this is team13
Task 4
assignment is to work with add,modify,delete,replace a string in line
sampath

18BC5087
sssss@sssss-Vostro-3578:~$ nano ex3.yml
sssss@sssss-Vostro-3578:~$ cat ex3.yml
---
- name: Examples of lineinfile
  hosts: localhost

  tasks:
    - name: "Example3: Replace a line in file with another line"
      become: yes
      become_user: sssss
      tags: examples
      lineinfile:
        path: /home/sssss/hello.txt
        # The String to Search
        regexp: "sampath"
        # The String to Replace
        line: "sakala sampath"
        state: present
        backup: yes

      register: example3out
sssss@sssss-Vostro-3578:~$ ansible-playbook ex3.yml --ask-vault-pass
Vault password:
[WARNING]: provided hosts list is empty, only localhost is available. Note that
the implicit localhost does not match 'all'

PLAY [Examples of lineinfile] *****
TASK [Gathering Facts] *****
ok: [localhost]

TASK [Example3: Replace a line in file with another line] *****
changed: [localhost]

PLAY RECAP *****
localhost : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

sssss@sssss-Vostro-3578:~$ cat hello.txt
hello world
this is team13
Task 4
assignment is to work with add,modify,delete,replace a string in line
sakala sampath

18BC5087
sssss@sssss-Vostro-3578:~$ echo "The line in the file replaced with another file"
The line in the file replaced with another file
sssss@sssss-Vostro-3578:~$
```

4.Removing a line in the file if it is present.

```
Activities Terminal Sep 29 19:30
sssss@sssss-Vostro-3578: ~
sssss@sssss-Vostro-3578:~$ cat hello.txt
hello world
this is team13
Task 4
assignment is to work with add,modify,delete,replace a string in line
sakala sampath

18BC5087
sssss@sssss-Vostro-3578:~$ nano ex4.yml
sssss@sssss-Vostro-3578:~$ cat ex4.yml
---
- name: Examples of lineinfile
  hosts: localhost

  tasks:
    - name: "Example1: Remove a line in the file"
      become: yes
      become_user: sssss
      tags: examples
      lineinfile:
        path: /home/sssss/hello.txt
        # String to Search
        regexp: "Task 4"
        # State is set to Absent to remove if the Searching Line is found
        state: absent
        backup: yes

      register: example4out
sssss@sssss-Vostro-3578:~$ ansible-playbook ex4.yml --ask-vault-pass
Vault password:
[WARNING]: provided hosts list is empty, only localhost is available. Note that
the implicit localhost does not match 'all'

PLAY [Examples of lineinfile] *****
TASK [Gathering Facts] *****
ok: [localhost]

TASK [Example1: Remove a line in the file] *****
changed: [localhost]

PLAY RECAP *****
localhost : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

sssss@sssss-Vostro-3578:~$ cat hello.txt
hello world
this is team13
assignment is to work with add,modify,delete,replace a string in line
sakala sampath

18BC5087
sssss@sssss-Vostro-3578:~$ echo "the line is removed in the file"
the line is removed in the file
sssss@sssss-Vostro-3578:~$
```

5. Insert After a matching line using insertafter parameter

```
Activities Terminal Sep 29 19:35
sssss@sssss-Vostro-3578: ~
sssss@sssss-Vostro-3578:~$ cat hello.txt
hello world
this is team13
assignment is to work with add,modify,delete,replace a string in line
sakala sampath

188CS087
sssss@sssss-Vostro-3578:~$ nano ex5.yml
sssss@sssss-Vostro-3578:~$ cat ex5.yml
---
- name: Examples of lineinfile
  hosts: localhost

  tasks:
    - name: "Example5: Insert after a matching line using insertafter parameter"
      become: yes
      become_user: sssss
      tags: lineinfileexample
      lineinfile:
        path: /home/sssss/hello.txt
        insertafter: "sakala sampath"
        line: "Implementing assignment2:task4"
        firstmatch: yes
      state: present
      register: lineinfileexample

sssss@sssss-Vostro-3578:~$ ansible-playbook ex5.yml --ask-vault-pass
Vault password:
[WARNING]: provided hosts list is empty, only localhost is available. Note that the
explicit localhost does not match 'all'

PLAY [Examples of lineinfile] *****
TASK [Gathering Facts] *****
ok: [localhost]

TASK [Example5: Insert after a matching line using insertafter parameter] *****
changed: [localhost]

PLAY RECAP *****
localhost : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

sssss@sssss-Vostro-3578:~$ cat hello.txt
hello world
this is team13
assignment is to work with add,modify,delete,replace a string in line
sakala sampath
Implementing assignment2:task4

188CS087
sssss@sssss-Vostro-3578:~$ echo "adding a line using insertafter parameter is done"
adding a line using insertafter parameter is done
sssss@sssss-Vostro-3578:~$
```

6. Commenting a line.

```
Activities Terminal Sep 29 19:41
sssss@sssss-Vostro-3578: ~
sssss@sssss-Vostro-3578:~$ cat hello.txt
hello world
this is team13
assignment is to work with add,modify,delete,replace a string in line
sakala sampath
Implementing assignment2:task4

188CS087
sssss@sssss-Vostro-3578:~$ nano ex6.yml
sssss@sssss-Vostro-3578:~$ cat ex6.txt
cat: ex6.txt: No such file or directory
sssss@sssss-Vostro-3578:~$ nano ex6.yml
sssss@sssss-Vostro-3578:~$ cat ex6.yml
---
- name: Examples of lineinfile
  hosts: localhost

  tasks:
    - name: "Example6: Comment the Line"
      become: yes
      become_user: sssss
      tags: lineinfileexample6
      lineinfile:
        path: /home/sssss/hello.txt
        regexp: '(hello .*)'
        line: '# {}'
        backrefs: yes
      state: present
      register: lineinfileexample6

sssss@sssss-Vostro-3578:~$ ansible-playbook ex6.yml --ask-vault-pass
Vault password:
[WARNING]: provided hosts list is empty, only localhost is available. Note that the
explicit localhost does not match 'all'

PLAY [Examples of lineinfile] *****
TASK [Gathering Facts] *****
ok: [localhost]

TASK [Example6: Comment the Line] *****
changed: [localhost]

PLAY RECAP *****
localhost : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

sssss@sssss-Vostro-3578:~$ cat hello.txt
# hello world
this is team13
assignment is to work with add,modify,delete,replace a string in line
sakala sampath
Implementing assignment2:task4

188CS087
sssss@sssss-Vostro-3578:~$ echo "the line in the file commented"
the line in the file commented
sssss@sssss-Vostro-3578:~$
```

7.Insert before a matching line using insert before parameter.

```

Activities Terminal
Sep 29 2012
sssss@sssss-Vostro-3578: ~
sssss@sssss-Vostro-3578:~$ nano ex7.yml
sssss@sssss-Vostro-3578:~$ cat hello.txt
hello world
this is team3
assignment is to work with add,modify,delete,replace a string in line
sakala sampath
Implementing assignment2:task4

18BC5087
sssss@sssss-Vostro-3578:~$ cat ex7.yml
---
- name: Examples of lineinfile
  hosts: localhost

  tasks:
    - name: "Example7: Insert before a line"
      become: yes
      become_user: sssss
      tags: example7
      lineinfile:
        path: /home/sssss/hello.txt
        insertbefore: 'hello.'
        line: "Inserting the line"
        backup: yes
        state: present

      registers: example7out
sssss@sssss-Vostro-3578:~$ ansible-playbook ex7.yml --ask-vault-pass
Vault password:
[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit
localhost does not match 'all'

PLAY [Examples of lineinfile] *****

TASK [gathering Facts] *****
ok: [localhost]

TASK [Example7: Insert before a line] *****
fatal: [localhost]: FAILED == ("changed": false, "msg": "Unsupported parameters for (lineinfile) module: backup Supported parameters include: attributes, backrefs, backup, content, create, delimiter, directory
mode, firstmatch, follow, force, group, insertafter, insertbefore, line, mode, owner, path, regexp, remote_src, selevel, serole, setype, seuser, src, state, unsafe_writes, validate")

PLAY RECAP *****
localhost      : ok=1  changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

sssss@sssss-Vostro-3578:~$ nano ex7.yml
sssss@sssss-Vostro-3578:~$ ansible-playbook ex7.yml --ask-vault-pass
Vault password:
[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit
localhost does not match 'all'

PLAY [Examples of lineinfile] *****

TASK [gathering Facts] *****
ok: [localhost]

```

[illegible]

