DevOps

Assignment – 2

Team 10

Team members:

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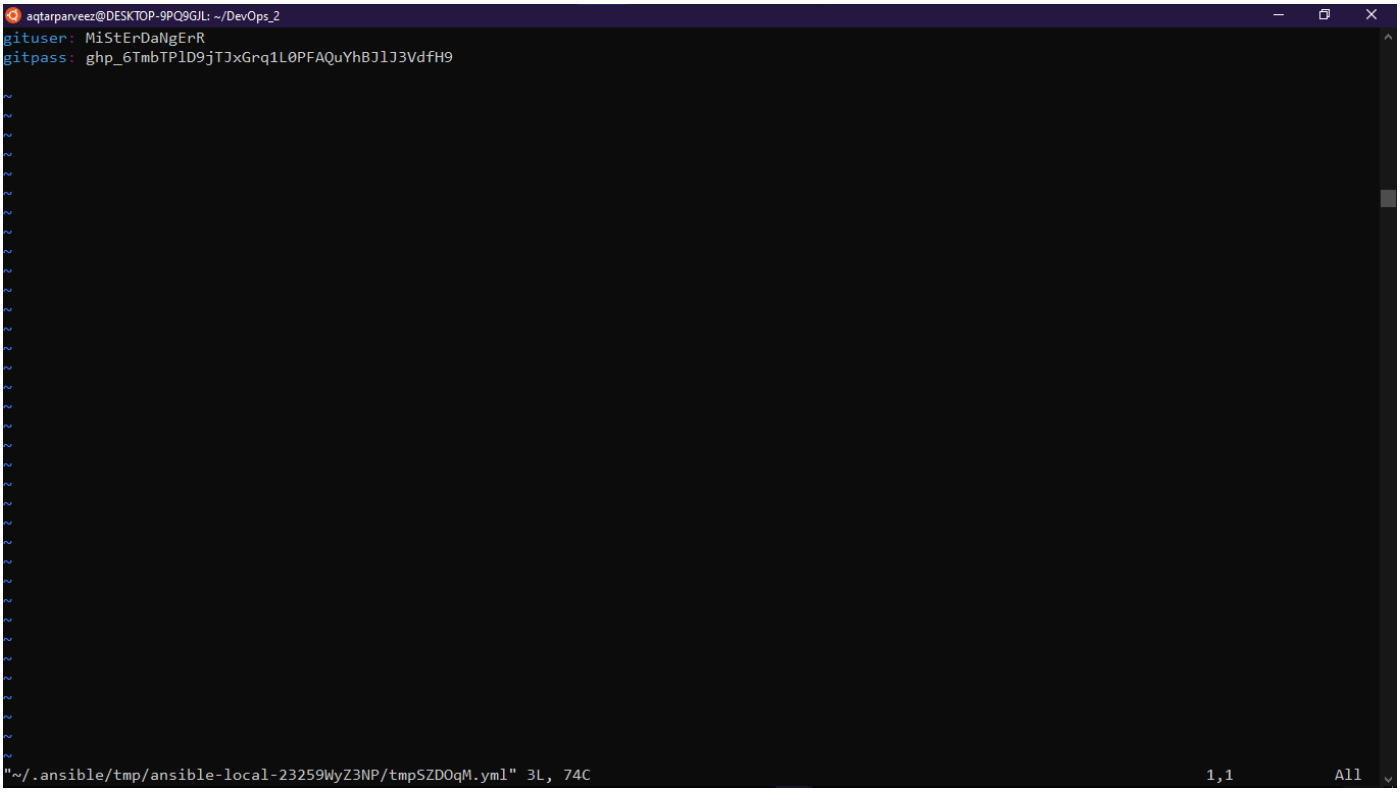
Ansible Playbook to checkout Web App source code from Git Repo and deploy on AWS EC2 Instance

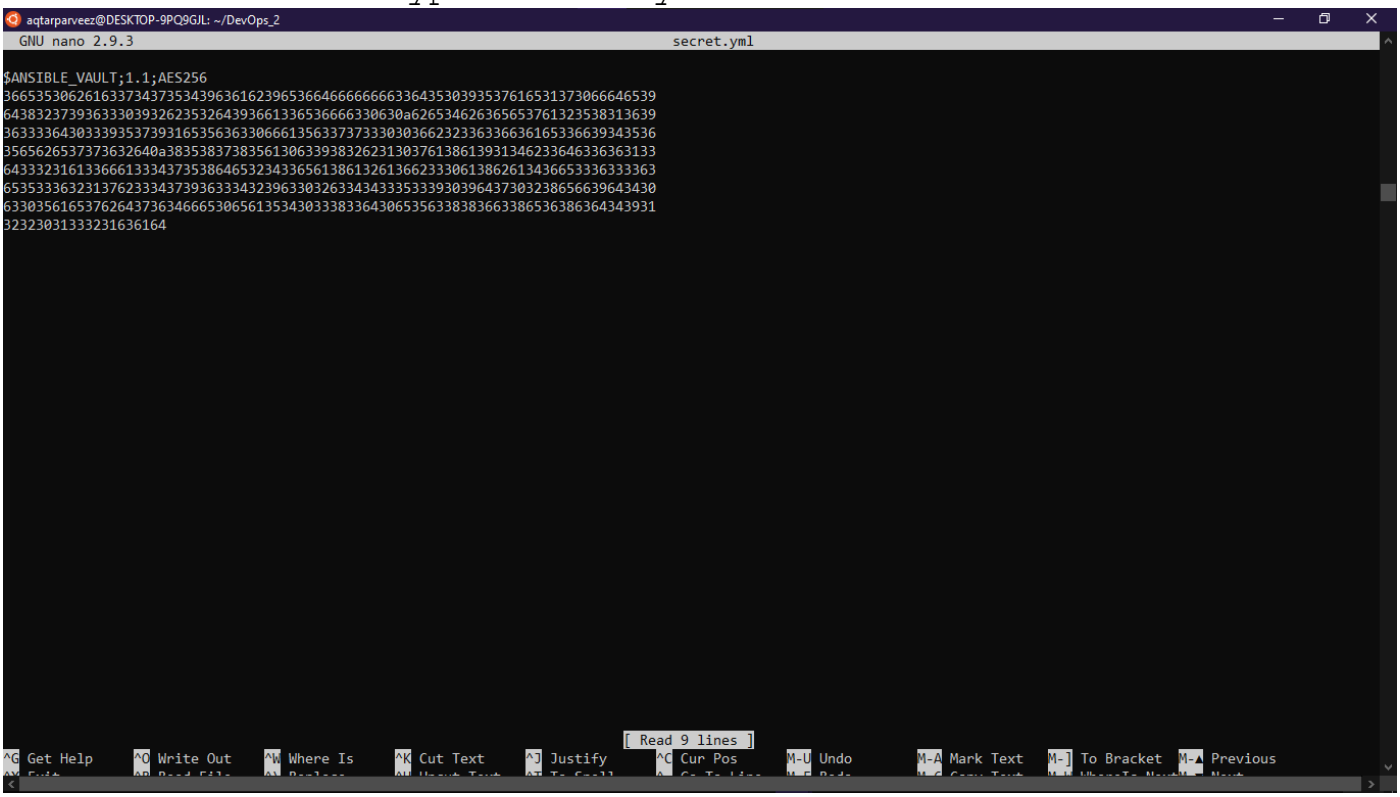
Step – 1 : Create a Personal Access Token(PAT) for a GitHub private repository or similar.

Step-2: create a `secret.yml` file which will contain our GitHub user ID and PAT and encrypt it within ansible-vault. Encrypt it and assign a passphrase of your choice.

```
ansible-vault create secret.yml
```



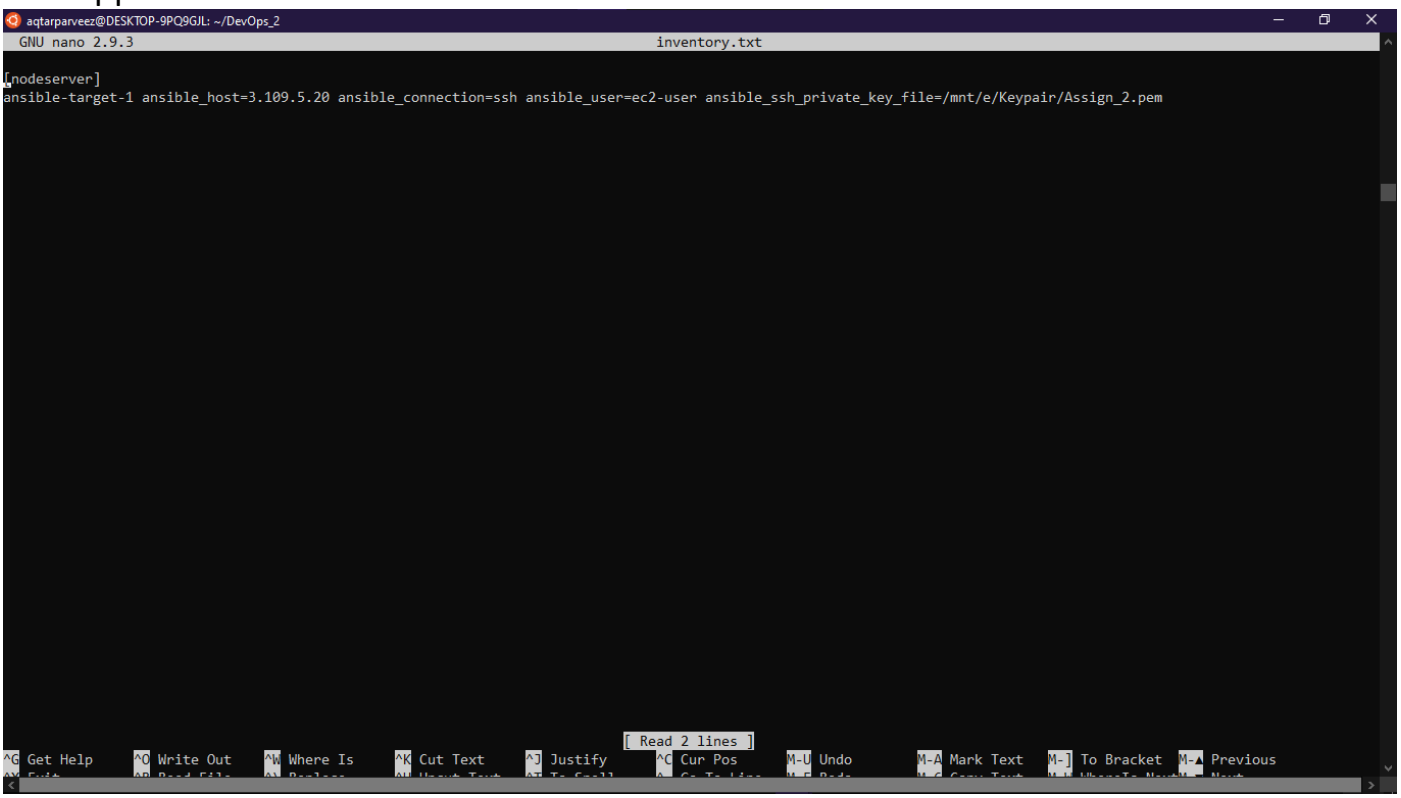

```
ansible-vault encrypt secret.yml
```



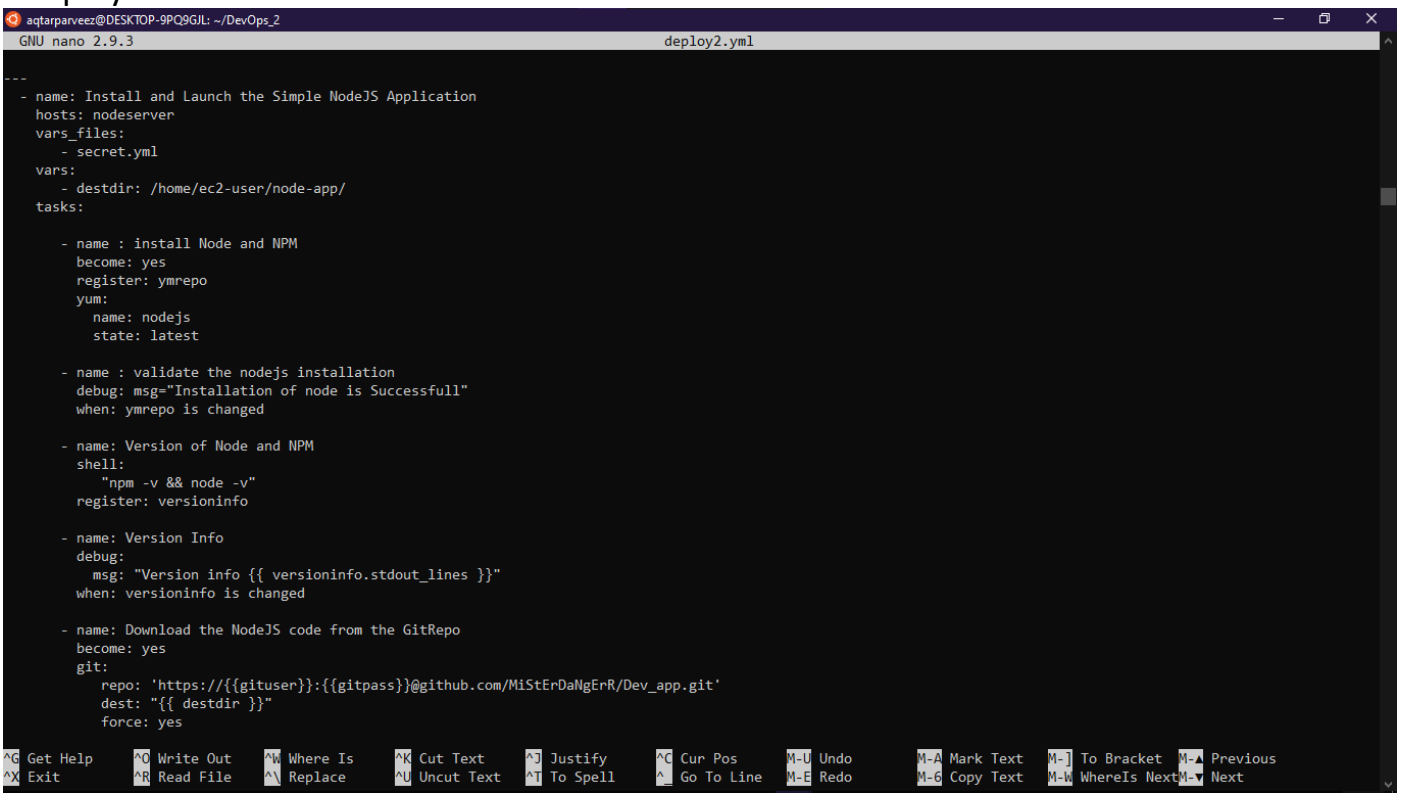
```
ansible-vault view secret.yml
```

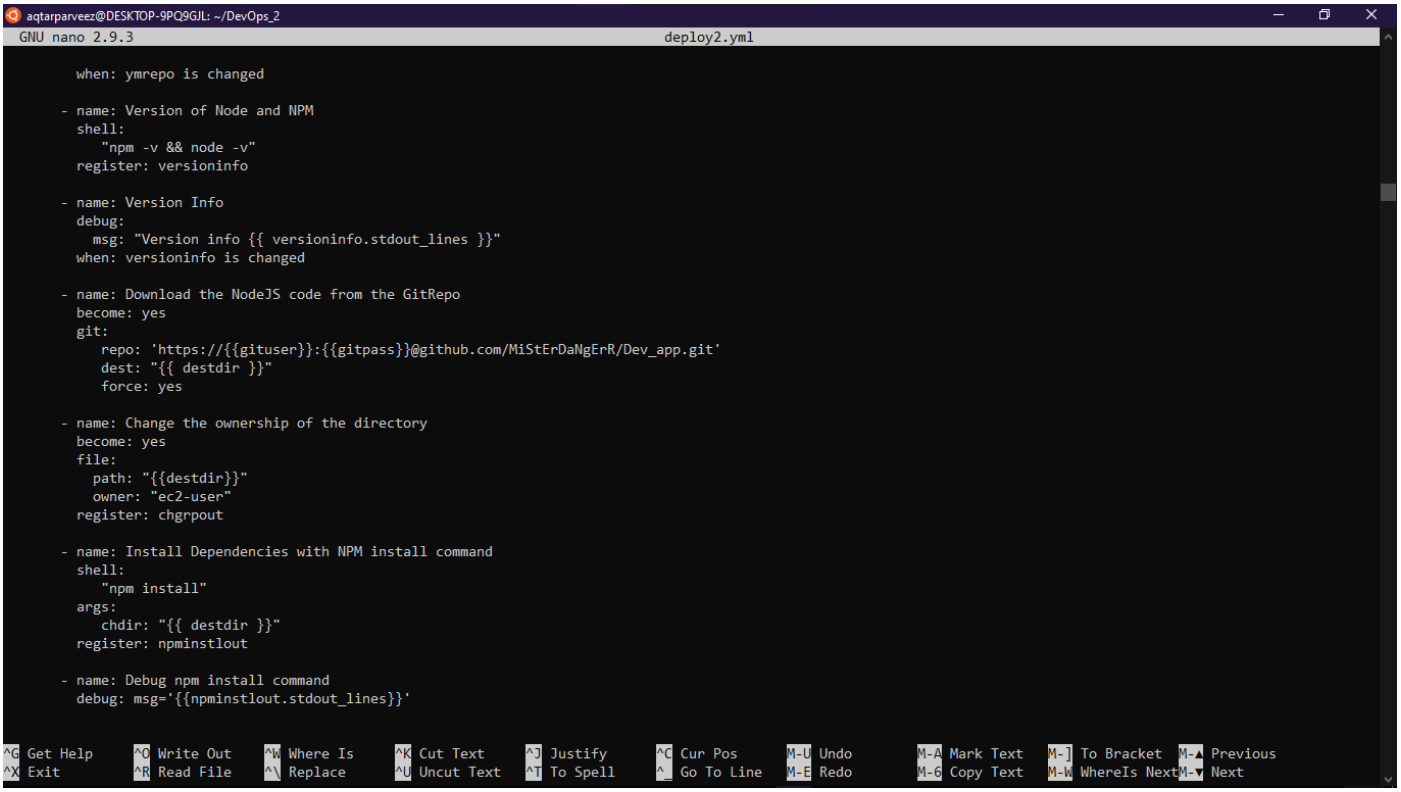
```
aqtarparveez@DESKTOP-9PQ9GJL:~/DevOps_2$ ansible-vault view secret.yml
Vault password:
gituser: MiStErDaNgErR
gitpass: 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
```

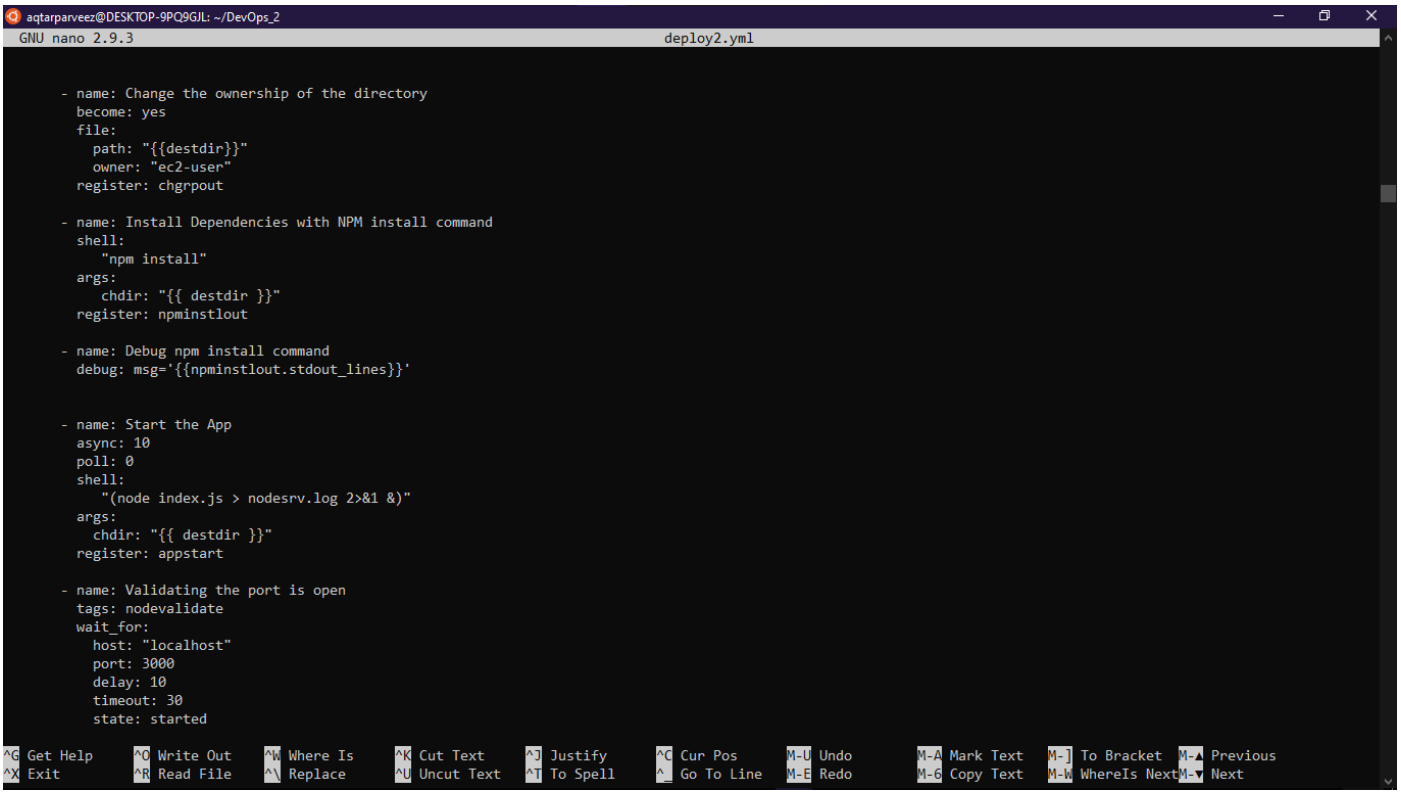
Step – 3: create our inventory file (inventory.txt here). This file contains the details (like public IP, private-key file name, etc) of the EC2 instance where we will be deploying the web app.



Step 4: Then we have to create our Ansible Playbook (deploy2.yml here). The contents of the playbook have been shown in three screenshots below.

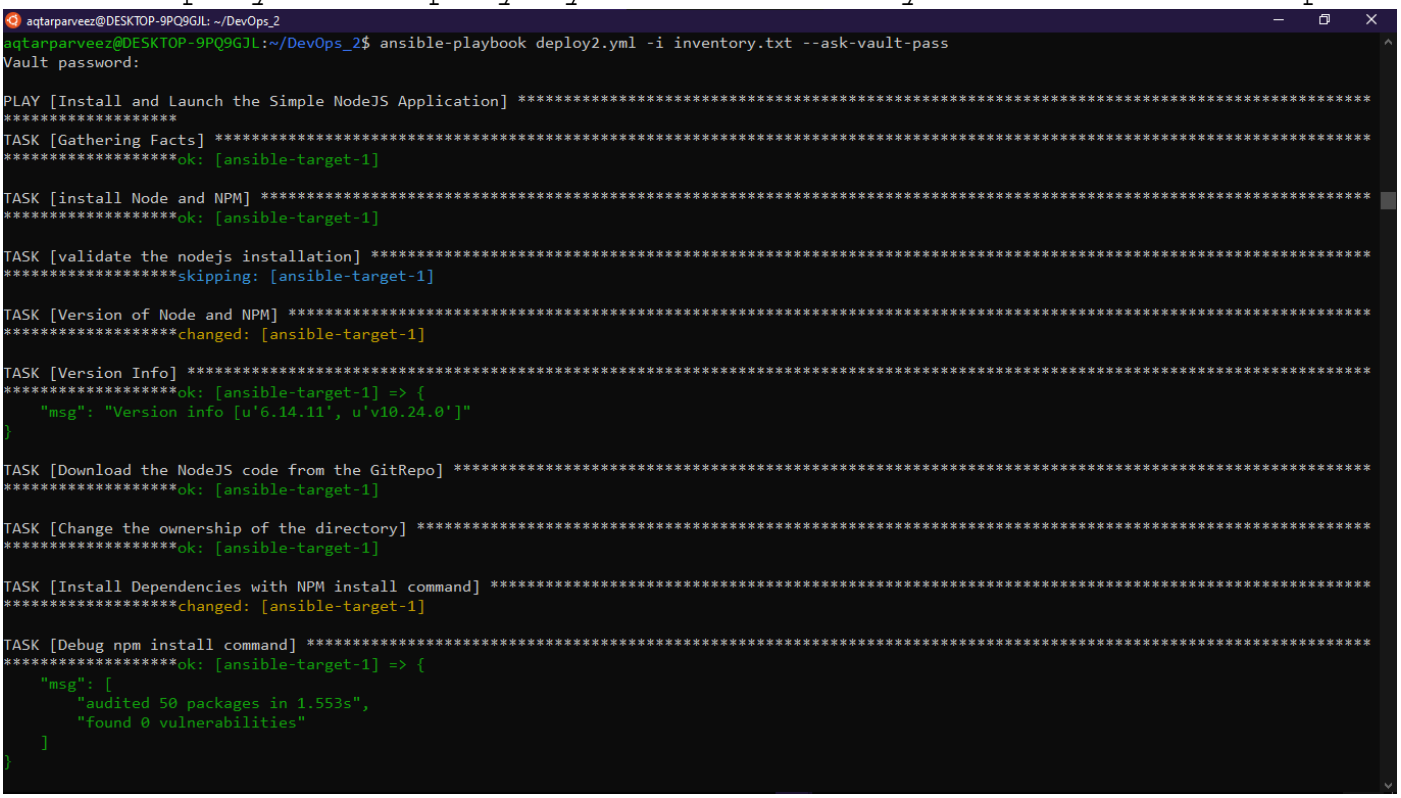


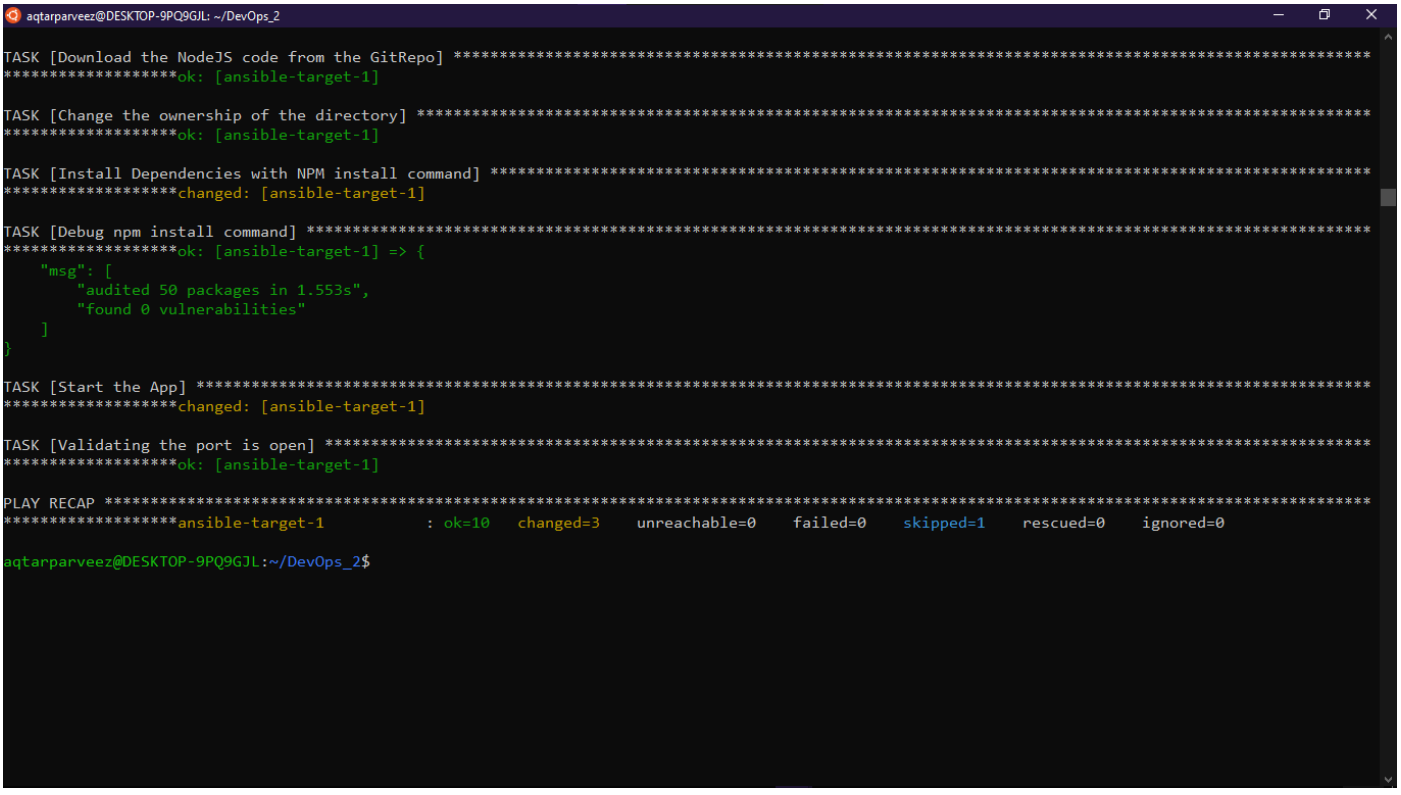

aqtarparveez@DESKTOP-9PQ9GJL: ~/DevOps_2
GNU nano 2.9.3 deploy2.yml
when: ymrepo is changed
- name: Version of Node and NPM
shell:
"npm -v && node -v"
register: versioninfo
- name: Version Info
debug:
msg: "Version info {{ versioninfo.stdout_lines }}"
when: versioninfo is changed
- name: Download the NodeJS code from the GitRepo
become: yes
git:
repo: 'https://{{gituser}}:{{gitpass}}@github.com/MiStErDaNgErR/Dev_app.git'
dest: "{{ destdir }}"
force: yes
- name: Change the ownership of the directory
become: yes
file:
path: "{{destdir}}"
owner: "ec2-user"
register: chgrpout
- name: Install Dependencies with NPM install command
shell:
"npm install"
args:
chdir: "{{ destdir }}"
register: npminstlout
- name: Debug npm install command
debug: msg='{{npminstlout.stdout_lines}}'
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos M-U Undo M-A Mark Text M-] To Bracket M-▲ Previous
^X Exit ^R Read File ^\ Replace ^U Uncut Text ^T To Spell ^_ Go To Line M-E Redo M-6 Copy Text M-W WhereIs Next M-▼ Next


aqtarparveez@DESKTOP-9PQ9GJL: ~/DevOps_2
GNU nano 2.9.3 deploy2.yml
- name: Change the ownership of the directory
become: yes
file:
path: "{{destdir}}"
owner: "ec2-user"
register: chgrpout
- name: Install Dependencies with NPM install command
shell:
"npm install"
args:
chdir: "{{ destdir }}"
register: npminstlout
- name: Debug npm install command
debug: msg='{{npminstlout.stdout_lines}}'
- name: Start the App
async: 10
poll: 0
shell:
"(node index.js > nodesrv.log 2>&1 &)"
args:
chdir: "{{ destdir }}"
register: appstart
- name: Validating the port is open
tags: nodevalidate
wait_for:
host: "localhost"
port: 3000
delay: 10
timeout: 30
state: started
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos M-U Undo M-A Mark Text M-] To Bracket M-▲ Previous
^X Exit ^R Read File ^\ Replace ^U Uncut Text ^T To Spell ^_ Go To Line M-E Redo M-6 Copy Text M-W WhereIs Next M-▼ Next

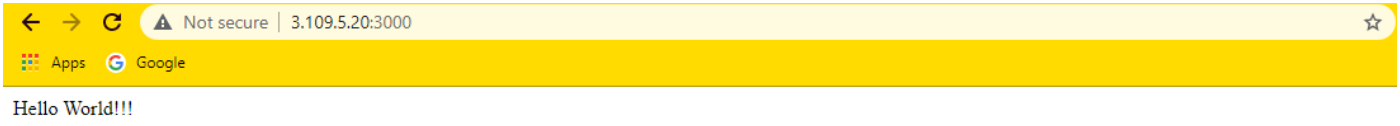
Step 5: Now the final step is to run the Ansible Playbook that we have created above.

```
ansible-playbook deploy2.yml -i inventory.txt --ask-vault-pass
```





Outcome: Our simple webapp files is saved on the instance and the ip in the browser shows the output.



Hello World!!!