Devops class guvi (DAY-5)

Granting Jenkins Sudo Privileges – The jenkins ALL=(ALL) NOPASSWD: ALL entry in the sudoers file allows the Jenkins user to run any command without a password prompt.

Restarting SSH Services – Commands like sudo systemctl restart ssh.service and sudo systemctl restart sshd.service restart the SSH service, ensuring remote login functionality.

Installing OpenSSH Server – The commands sudo apt update and sudo apt install openssh-server update package lists and install the OpenSSH server for secure remote access.

Checking SSH Service Status – sudo systemctl status ssh checks if the SSH service is running and displays its current status.

Systemd Service File Lookup – ls /etc/systemd/system/sshd.service or ls /usr/lib/systemd/system/sshd.service helps locate the SSH daemon's systemd service file.

Reloading Systemd Daemon – sudo systemctl daemon-reload ensures that systemd picks up changes in service configurations without requiring a reboot.

Encoding Minikube Certificate – cat /home/david/.minikube/ca.crt | base64 -w 0; echo encodes the Minikube CA certificate in base64 format, likely for authentication.
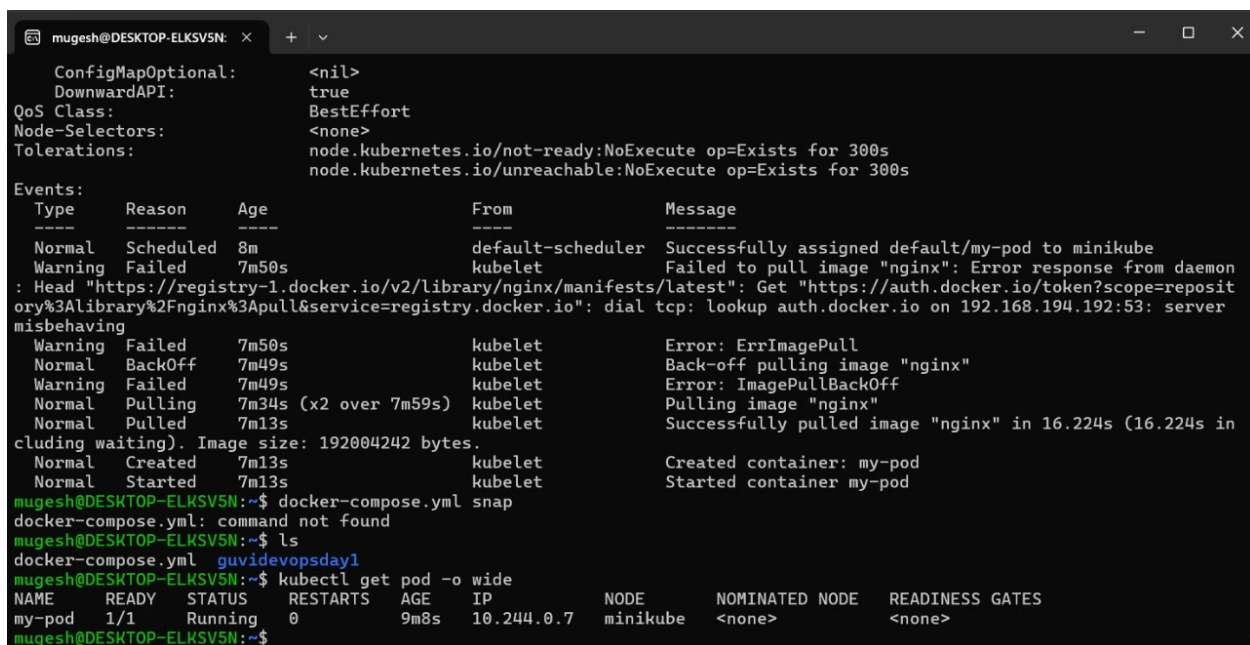
Changing Docker Socket Permissions – sudo chmod 666 /var/run/docker.sock grants read and write access to all users for Docker's Unix

socket, allowing non-root users to interact with Docker.

Deploying Kubernetes Resources – sh 'kubectl apply -f deployment.yml --validate=false' applies a Kubernetes deployment file, ignoring validation errors.

Accessing Minikube Service – minikube service my-service --url | xargs curl retrieves the Minikube service URL and sends an HTTP request to test its accessibility.

ScreenShots:

```
  libwrap0 ncurses-term openssh-server openssh-sftp-server ssh-import-id
The following packages will be upgraded:
  openssh-client
1 upgraded, 5 newly installed, 0 to remove and 55 not upgraded.
Need to get 880 kB/1785 kB of archives.
After this operation, 6861 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 openssh-sftp-server amd64 1:9.6p1-3ubuntu13.8 [37.3 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble/main amd64 libwrap0 amd64 7.6.q-33 [47.9 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 openssh-server amd64 1:9.6p1-3ubuntu13.8 [509 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble/main amd64 ncurses-term all 6.4+20240113-1ubuntu2 [275 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 ssh-import-id all 5.11-0ubuntu2.24.04.1 [10.1 kB]
Fetched 880 kB in 4s (222 kB/s)
Preconfiguring packages ...
(Reading database ... 44033 files and directories currently installed.)
Preparing to unpack .../0-openssh-client_1%3a9.6p1-3ubuntu13.8_amd64.deb ...
Unpacking openssh-client (1:9.6p1-3ubuntu13.8) over (1:9.6p1-3ubuntu13.5) ...
Selecting previously unselected package openssh-sftp-server.
Preparing to unpack .../1-openssh-sftp-server_1%3a9.6p1-3ubuntu13.8_amd64.deb ...
Unpacking openssh-sftp-server (1:9.6p1-3ubuntu13.8) ...
Selecting previously unselected package libwrap0:amd64.
Preparing to unpack .../2-libwrap0_7.6.q-33_amd64.deb ...
Unpacking libwrap0:amd64 (7.6.q-33) ...
Selecting previously unselected package openssh-server.
Preparing to unpack .../3-openssh-server_1%3a9.6p1-3ubuntu13.8_amd64.deb ...
Unpacking openssh-server (1:9.6p1-3ubuntu13.8) ...
Selecting previously unselected package ncurses-term.
Preparing to unpack .../4-ncurses-term_6.4+20240113-1ubuntu2_all.deb ...
Unpacking ncurses-term (6.4+20240113-1ubuntu2) ...
Selecting previously unselected package ssh-import-id.
Preparing to unpack .../5-ssh-import-id_5.11-0ubuntu2.24.04.1_all.deb ...
Unpacking ssh-import-id (5.11-0ubuntu2.24.04.1) ...
Setting up openssh-client (1:9.6p1-3ubuntu13.8) ...
Setting up ssh-import-id (5.11-0ubuntu2.24.04.1) ...
Setting up libwrap0:amd64 (7.6.q-33) ...
Setting up ncurses-term (6.4+20240113-1ubuntu2) ...
Setting up openssh-sftp-server (1:9.6p1-3ubuntu13.8) ...
Setting up openssh-server (1:9.6p1-3ubuntu13.8) ...

Creating config file /etc/ssh/sshd_config with new version
Creating SSH2 RSA key; this may take some time ...
```

```
mugesh@DESKTOP-ELKSV5N:~$ ls
docker-compose.yml  guvidevopsday1
mugesh@DESKTOP-ELKSV5N:~$ kubectl get pod -o wide
NAME      READY   STATUS    RESTARTS   AGE    IP           NODE       NOMINATED NODE   READINESS GATES
my-pod    1/1     Running   0          9m8s   10.244.0.7   minikube   <none>           <none>
mugesh@DESKTOP-ELKSV5N:~$ kubectl logs my-pod
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2025/03/20 04:43:28 [notice] 1#1: using the "epoll" event method
2025/03/20 04:43:28 [notice] 1#1: nginx/1.27.4
2025/03/20 04:43:28 [notice] 1#1: built by gcc 12.2.0 (Debian 12.2.0-14)
2025/03/20 04:43:28 [notice] 1#1: OS: Linux 5.15.167.4-microsoft-standard-WSL2
2025/03/20 04:43:28 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2025/03/20 04:43:28 [notice] 1#1: start worker processes
2025/03/20 04:43:28 [notice] 1#1: start worker process 29
2025/03/20 04:43:28 [notice] 1#1: start worker process 30
2025/03/20 04:43:28 [notice] 1#1: start worker process 31
2025/03/20 04:43:28 [notice] 1#1: start worker process 32
2025/03/20 04:43:28 [notice] 1#1: start worker process 33
2025/03/20 04:43:28 [notice] 1#1: start worker process 34
2025/03/20 04:43:28 [notice] 1#1: start worker process 35
2025/03/20 04:43:28 [notice] 1#1: start worker process 36
mugesh@DESKTOP-ELKSV5N:~$
                              $ kubectl logs <pod-name>
```

mugesh@DESKTOP-ELKSV5N:~$ cd ~/.kube/
mugesh@DESKTOP-ELKSV5N:~/.kube$ cat /home/mugesh/.minikube/ca.crt | base64 -w 0; echo
LS0tLS1CRUdJTiBDRVJUSUZJQ0FURS0tLS0tCk1JSURCakNDQWU2Z0F3SUJBZ01CQVRBTkJna3Foa2lHOXcwQkFRc0ZBREFWTVJNd0VRWURWUVFERXdwdGFXNXAKYTNWaVpVTkJNQjRYRFRJMU1ETXhPREEyTXpZME1sb1hEVE0xTURNeE56QTJNelkwTWxvd0ZURVRNQkVHQTFVRVQp
BeE1LYldsdWFXdDFZbVZEUVRDQ0FTSXdEUVlKS29aSWh2Y05BUUVCQ1FBRGdnRVBBRENDQVFvQ2dnRUJBTVpMCnJ3TGhkZnhsN1pHRVp0TnlpY9YMD8BL0tVK2lsaDRMSFc0bnJrZTRSVE5rdUtURnZ6ckhqbUdZTDUwdENheUcKL09WQ0tVaX8rc25mcE82RFFmK1ppN0Uyc0piUG
hzZ2TzckuxTemluRDg0NTZwKzdZN2FmSURCZD81c3ZtRXhuMwpidG1vZjNiSTRRWW1WcWRuMV2MnVEQTUrVEgweXdSbkFJNmtCSDZjQS9EUzhpdWN2SmJxYUFDRTVlVnRkNjhnCm5iTkVSb1JOTGxiUHRSY031SHErS1ZCckd5eFpHVWx6L1pieEl5NUJZZHl6VE5qSnRFemd4d1FOe
khxckFYNmkKckd2Yk1jRE9WNHN2anV0Kz13VDVlQX1lY1hUKJVaVjRPNURNdkxNOUxVckNFcElFZ25JeGpCZzFRbG1kUTJISwo2cTJzaEhERW1fbW5rV1fmSWhFQ0FJRUFBYU5oTUY4d0RnNURWUjBQQVFIL0JBUURBZ0tvTUlwR0ExVWRKUVFXCk1CUUdDQ3NHQVFVRkJ3TUNCZ2dy
QmdFRkJRWXBBVEFQQmdOVkhSTUJBZjhHQ1RBREFRSC9NQj8HQTFVZERnUVxKQkJUMFlFdjVlRUJ6S1F0ZFpjbX1XcGZKb2VHcEpEQU5CZ2txaGtpRzl8MEJBUXNGQUFPQ0FRRUFldGkxRXpDVQpZSk95ZjRmZkgxNUJhS2J0T1k9r1jE1bE00UWgrOUFJM01RM1NKa0hySXhUZ2dZNi9
XRGloMHBTR3pmZHRlcmpwClpyb3pTOERpejRuMkxBNlNFaktjZjdRSFVCNG1Hd1U1bSs5L2ZVazhnRmtTWElvRjBGODlKbld0OHBQekJRZ3UKRWT2eFhONUo2SktWcE50QVdMWE4zbTFEdDZSN2VGMkdqM29MMUl4NUd4QS9STUJnRHBWTVZSbU9oNDhTamROQQpDbkWpGYnFJWHE1K0
gvK01wcWp1SkFpZnNCeU0rY2JxdFRxaJdqTW5wRJRHZlM0aWgxcVNUOHRSNU5UWm80exX11CjdMcmNPdUlhVDdNYm5DOHA0azJjMDJCUVQSY11kdXhDN083K2tqdVR1LzFPZ21qbTZwaGR6OEdJZ3BWM0lOSJQKS0tLbzxUTzA0NHFqTkE9PQotLS0tLUVORCBDRVJUSUZJQ0FURS0tL
S0tCg==
mugesh@DESKTOP-ELKSV5N:~/.kube$ cat /home/mugesh/.minikube/client.crt | base64 -w 0; echo
cat: /home/mugesh/.minikube/client.crt: No such file or directory

mugesh@DESKTOP-ELKSV5N:~/.kube$ sudo cat /home/mugesh/.minikube/client.crt | base64 -w 0; echo
[sudo] password for mugesh:
cat: /home/mugesh/.minikube/client.crt: No such file or directory

mugesh@DESKTOP-ELKSV5N:~/.kube$ cat /home/mugesh/.minikube/client.crt | base64 -w 0; echo
cat: /home/mugesh/.minikube/client.crt: No such file or directory

mugesh@DESKTOP-ELKSV5N:~/.kube$ cat /home/mugesh/.minikube/profiles/minikube/client.key | base64 -w 0; echo
LS0tLS1CRUdJTiBSU09EgUF3JVkFURSBLRVktLS0tLQpNSUlFcGdJQkFBS0NBUVRcU8rRjhFd1RGTTZrV0Zt eTdwdDFPcE44QjRqZmlRcnVqU0hLenE0c2hJMXA1Y0hOCmd2Q21rZ1orN0d5c3k3bjdVdzJkRmZWTn16NExzZMzhqeklTUDNrR1R0NXMvWm94TEVyVkRKT0ZxOE5Cby9
nLlkkVnhPTzN2ZlpWRVhCYndnK0wvMUZSNkNCTmxrK0ftKb3AyU1Yyd2MxQzIrS04rZV81Qk5XTUZZeFVLMkVadndPKwo3ZXVwbm9qQU9xOUxCWk1FTGN3ZWpMUnRUSUR4R3RVQXNlbHVSSU1KK2M5MkREZ33wSVB3Wm83STEyTDIrK1dUCl1BaC9uZjZtOVU1anZkQS95Yi94dTNWZF
0yUVdPQjZxbj0RaWhJTU5hU2hpaUUxZEVEODBSL2JoMeJxTEplZ08KTlJFYX1XdWswNm5kbnZLdDc0L2NicmhXY0dJVjNnUDNlSWFXYndJREFRQUJBb0lCQVFDYWpLYU1N0UN4RkdzZAp1Tkl0b0lNYTE1cDhlaWVtaEMzQ1I4cjJVRGSCK20yTEdFWWZLSEg2M1o1NFJPUEFIYUVUV
mowRHZhc3g2TTBhCmRWSVc1SitKd1l5V1NKMHovOT8lZkYyMCs5U09BdHhLc2N4RnZVclRpUU4yS1d5bHczRE3EbiszQzR1cVlQS1EKeXRqR1k1UEZvVGNkV3FKd25xaytHdTlSTjFRNWFkdEpkenpqMFFLdGJockVJNWJzvVjR2UTBTRjVHbT8mVkozLwpEZnRVRl1NnTyti0VAvTzRV
bmxSaFBObzUwQ0tueWRpMStCaldUVlNRT1E5QzBoYVZ8eXhGdkh4RTVDRnBMUlBDCkE0VjRMcERtS3ZhTkpTRXZiVU9ld09SbHhnTWtW0E5GeWlseEJqUi9MWUNCTEhlOHZGWl3uZ11GZzR8cGRVc1oKU2h0ZERTbmh8b0dCQUSOVHRYeDRKdFBrb2gvSk1yZDhLeHczTmtNT0MzdWt
5d1Zha11qRWt0SXdXemtwOUtOegpKNnFUQVlFNk5mbn15ckhNUHVKenp5Z1FUVzVVTHZnTWFyVTdBay9haVRGZUtHTGpJeWpCQXNBVlhrZ0NvejlWCmcJQXRGbFNFWUdLaJhONWlNZ291U1duVmgrM2JLeDkzZU1nL3h5U1FXQ0MvMkJETnpRUFY4eDEJQW9HQKFNeWwKdldzQZxDWU
ZxU3ozTXZyUzQ4RWJSSGNjWHA5MmFhTzZ2e1tPbExKQ1UxLzZ1UFo5NDdZNTzveDhmVTN8cFJBNgpjMFZRU0l4UFRiaFV2U1FaQ3ZIW1FRZjBmbHdFamhyTk5MbU1NSkxSR0lsM0FMcktlWWJhRnFNYXUlSnBNWhwCmVRQXREQUJoNGRucm5QeDRNMHU3TldVSlc0NlppMWw5Nkwzc
2crYWRBb0dCQUpYdyt3QkpzQ01BUWhnVGhheXkkcVZQbn1OUmpECnEzL21UYUVoRGNpT0FoOTFmajhQUllMSGpXdldhWGl0ekI3QkRscUdpOGl1dFEzTisvVTJRawpTMEl6a0R4ZZJwOWNrNE0yYm1mb2FxOG5lakhWelVhT3dsVXFhSUduTz84Q1pIejFaMVBNY8packwzc1EydFFF
CnpPb29kbi8yK3RDaHpnaCtQVXpQY1NRcEFvR0JBS1lDbE1pRXR6cG55V0orOWlPUW4wSVdzRTlwdX0HcW0wZVoKKzEvQTNDWHRTR2szTzE1SVZrUmhsNURCQ05ydWlEaDY1RjRhdmlXOX1TUWNmaDFyaDhMeTZkTUJDSj8meGw5QgpOemoyeW81dzdhMUx1VHZrZW5MaG9pQk1tNVN
6WEhFWDg5eVpNZS9TTUhmQkRxakEzWEtnUEV0bTN1TzR4bU5jCnd4V2F6SU5aQW9HQkFMZWxyMXZqano2VG5DanBTcE8rUk9CY2NWYkN0Smt zSFRYc11yZ04zbm5oVTR0L0J1SWkKVXd0MUZwQjk3SW02TzFzc29tVEZmOVJVRFpTcE1qan1ZQXYxNlpIMG9KeFlvSEVkQjh8N2tLcV
EyTi9PNjFoRgo5ZlRpbF50WUpDMGNUV3dMb0dFTGtqWUM2THZsVyZEl4Z3JsRUpzSDgzdk10cjN0VmFFZGFKVgotLS0tLUVORCBSU0EgUFJJVkFURSBLRVktLS0tLQo=
mugesh@DESKTOP-ELKSV5N:~/.kube$ cat /home/mugesh/.minikube/profiles/minikube/client.crt | base64 -w 0; echo
LS0tLS1CRUdJTiBDRVJUSUZJQ0FURS0tLS0tCk1JSUR3VENDQWdtZ0F3SUJBZ01CQWp8TkJna3Foa2lHOXcwQkFRc0ZBREFWTVJNd0VRWURWUVFERXdwdGFXNXAKYTNWaVpVTkJNQjRYRFRJMU1ETXhPREEyTXpZME1sb1hEVEVEeExTURNeE9EQTJNelkwTWxvd01URVhOQlVHVFVRQp
DaE1PYzlsemRHVnRPbTFoYzNSbGNuTXhGakFVQmd0VkJ8TVREVzFwYmlscmRXSmxMWFZGWlhJd2dnRWlNQTBHCNTcUdTSWIzRFFFQkFRVUFBNElCRHdBd2dnRUtBb0lCQVFDbzc0WHdUQk1VenFSaWdi THVtM1U2azN3SGlOK0oKQ3U2Tkljck9yaXlFaldubHdjMkM4S2FTQm43c2
JLekx1ZnRURFdwVjlVM0xQZ3RQ2n1QTWhJLZVRWk8zbXoSbQpqRXNTdFVNazRXcncwR2orRDlcWEU0N2U5OWxVUmN0dkNLNHYvVVZlb0lfM1dUNG9takx5aS1hiQnpVTGl0bzM1CjQrNEUxWkKWakzRcllSbS90Nzd0MjZtZWlNQTZyM9HNGa2dRdHpCNk10RzfNZ10FYTFRQ3g2VzVrZ
JduhXozWU0KT0Nluzx4aG1qcJpYWXZlNzVaTmdDSCtk3FiMVRtTzkwRC9Kdl9HUZRWMCt0Qlk0SHFxZlJOSdhHdzFwS0dLSQpUVj8RUHpSS0l1SFp1b3NrZU60MUVSckphNlRUckQyZThwM3ZqOXh1dUZadlIcWGVRLZNjaH8adkFnTUJ8QUdqCllEQmVNQTRHQTFVZER3RUlvd1FF
QXdJRm9FQURCZ05wSFVRUJZqQVCZ2dyQmdFRkJRY0RBUVlJS3dZQkJRVUgkQXd3d0RBWUR WUjBUQVF1L0JBSXd8REFmQmd0VkhTTUVHRZFX203UMFlFdjVlRUJ6S1F0ZFpjbXlXcGZKb2VHcApKREFQQmdrdW5aUc5dzBCQVFzRkFBT0NBUUVBRHp3UWZzNGtBZmQ2TU2JZG1vcEt
yck5YZjFGalpFdjkrYnpiCjFyWVNHR18jSTArckXRrSkFNdExWbzJic0FKVWdrblBIWkSHLZNJRmFxTXNDKzczYWFmZlpRVVUrTJp6YWJXa20KSU9MRzfWia3FXODZEVHhLZHd0bHdESDNaL2c4Q2pKNnhMTXVwTDE0TGNXSWxnZU5RSDBrc2FlTVdPZHh0SXU2Sgor NWlkL2NFR1hhMU
S2aW9xMUVKdWJ8eHErOGhORFVrQ2djM1NGVXZzSlhtZ1hRaTUrVFNUUDhvQzFTMXVoUUVpCj8hQm1lY0QrVzExN25tTlE4czhtaD33TzJqYk0rc38CbkgvRlA3d1J0VXRsaGhUcVN0S3hpZWJzUy90N2c1UU0KR0VvM2x1cVQzczgxaZNFaWdCM1p40Vl6NFhvaGR2RnJJWSswU1RHS
W8wZldzaUMyL3c9PQotLS0tLUVORCBDRVJUSUZJQ0FURS0tLS0tCg==
mugesh@DESKTOP-ELKSV5N:~/.kube$

mugesh@DESKTOP-ELKSV5N: ~

Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 5.15.167.4-microsoft-standard-WSL2 x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/pro

 System information as of Fri Mar 21 05:41:29 UTC 2025

  System load: 1.05   Processes: 36
  Usage of /:   0.8% of 1006.85GB Users logged in: 0
  Memory usage: 11%   IPv4 address for eth0: 172.28.45.246
  Swap usage: 0%

 * Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
   just raised the bar for easy, resilient and secure K8s cluster deployment.

   https://ubuntu.com/engage/secure-kubernetes-at-the-edge

This message is shown once a day. To disable it please create the
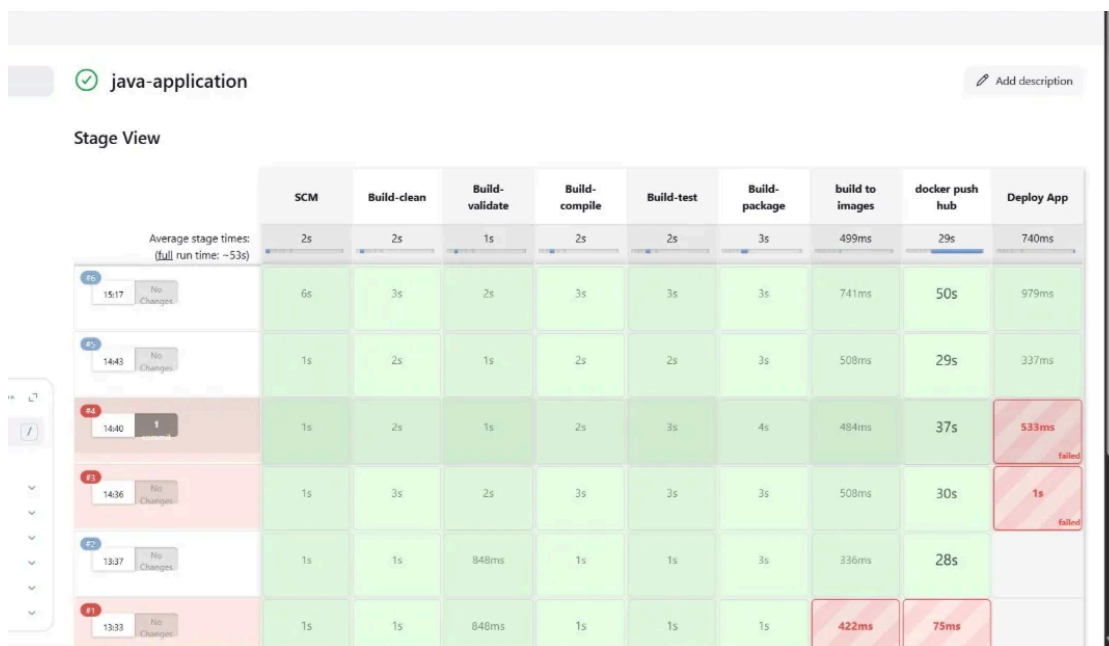/home/mugesh/.hushlogin file.
mugesh@DESKTOP-ELKSV5N:~$ minikube start
😄 minikube v1.35.0 on Ubuntu 24.04 (amd64)
✨ Using the docker driver based on existing profile
👍 Starting "minikube" primary control-plane node in "minikube" cluster
🚜 Pulling base image v0.0.46 ...
🔄 Restarting existing docker container for "minikube" ...
🐳 Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
    ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
🌟 Enabled addons: storage-provisioner, default-storageclass
🏄 Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
mugesh@DESKTOP-ELKSV5N:~$ kubectl get pod
No resources found in default namespace.
mugesh@DESKTOP-ELKSV5N:~$ kubectl get node
NAME   STATUS   ROLES   AGE   VERSION
minikube   Ready   control-plane   47h   v1.32.0
mugesh@DESKTOP-ELKSV5N:~$ sudo systemctl restart ssh.service
[sudo] password for mugesh:
Failed to restart ssh.service: Unit ssh.service not found.
mugesh@DESKTOP-ELKSV5N:~$ jenkins ALL=(ALL) NOPASSWD: ALL
-bash: syntax error near unexpected token `('

```
mugesh@DESKTOP-ELKSV5N:~$ sudo visudo
mugesh@DESKTOP-ELKSV5N:~$ sudo systemctl restart ssh.service
mugesh@DESKTOP-ELKSV5N:~$ sudo systemctl daemon-reload
mugesh@DESKTOP-ELKSV5N:~$ sudo systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
     Loaded: loaded (/usr/lib/systemd/system/ssh.service; disabled; preset: enabled)
     Active: active (running) since Fri 2025-03-21 05:57:41 UTC; 39s ago
TriggeredBy: ● ssh.socket
       Docs: man:sshd(8)
             man:sshd_config(5)
   Main PID: 6531 (sshd)
      Tasks: 1 (limit: 8240)
     Memory: 1.2M ()
     CGroup: /system.slice/ssh.service
             └─6531 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Mar 21 05:57:41 DESKTOP-ELKSV5N systemd[1]: Starting ssh.service - OpenBSD Secure Shell server...
Mar 21 05:57:41 DESKTOP-ELKSV5N sshd[6531]: Server listening on :: port 22.
Mar 21 05:57:41 DESKTOP-ELKSV5N systemd[1]: Started ssh.service - OpenBSD Secure Shell server.
mugesh@DESKTOP-ELKSV5N:~$ ls
docker-compose.yml  guvidevopsday1  pod.yml
mugesh@DESKTOP-ELKSV5N:~$ ls /etc/systemd/system/sshd.service or ls /usr/lib/systemd/system/sshd.service
ls: cannot access '/etc/systemd/system/sshd.service': No such file or directory
ls: cannot access 'or': No such file or directory
ls: cannot access 'ls': No such file or directory
ls: cannot access '/usr/lib/systemd/system/sshd.service': No such file or directory
mugesh@DESKTOP-ELKSV5N:~$ cd ~/.kube/
mugesh@DESKTOP-ELKSV5N:~/.kube$ ls
cache  config
mugesh@DESKTOP-ELKSV5N:~/.kube$ sudo nano config
[sudo] password for mugesh:
mugesh@DESKTOP-ELKSV5N:~/.kube$ sudo nano config
mugesh@DESKTOP-ELKSV5N:~/.kube$ sudo vi config
mugesh@DESKTOP-ELKSV5N:~/.kube$ kubectl get node
NAME       STATUS   ROLES           AGE    VERSION
minikube   Ready    control-plane   47h    v1.32.0
mugesh@DESKTOP-ELKSV5N:~/.kube$ sudo vi config
mugesh@DESKTOP-ELKSV5N:~/.kube$ kubectl get node
NAME       STATUS   ROLES           AGE    VERSION
minikube   Ready    control-plane   2d     v1.32.0
mugesh@DESKTOP-ELKSV5N:~/.kube$
```

```
mugesh@DESKTOP-ELKSV5N:~$ minikube start
😄  minikube v1.35.0 on Ubuntu 24.04 (amd64)
✨  Using the docker driver based on existing profile
👍  Starting "minikube" primary control-plane node in "minikube" cluster
🚜  Pulling base image v0.0.46 ...
🔄  Restarting existing docker container for "minikube" ...
🐳  Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
🔎  Verifying Kubernetes components...
    ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
🌟  Enabled addons: default-storageclass, storage-provisioner
🏄  Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
mugesh@DESKTOP-ELKSV5N:~$ kubectl run my-pod --image=nginx --port=80
pod/my-pod created
mugesh@DESKTOP-ELKSV5N:~$ kubectl get pod
NAME     READY   STATUS             RESTARTS   AGE
my-pod   0/1     ContainerCreating  0          9s
mugesh@DESKTOP-ELKSV5N:~$ kubectl delete all -all
error: unknown shorthand flag: 'a' in -all
See 'kubectl delete --help' for usage.
mugesh@DESKTOP-ELKSV5N:~$ kubectl delete all --all
pod "my-pod" deleted
service "kubernetes" deleted
mugesh@DESKTOP-ELKSV5N:~$ kubectl run my-pod --image=nginx --port=7070
pod/my-pod created
mugesh@DESKTOP-ELKSV5N:~$ kubectl get pod
NAME     READY   STATUS    RESTARTS   AGE
my-pod   1/1     Running   0          56s
mugesh@DESKTOP-ELKSV5N:~$
```

Commands:

jenkins ALL=(ALL) NOPASSWD: ALL

```
 sudo systemctl restart ssh.service
sudo systemctl restart sshd.service


sudo apt update
sudo apt install openssh-server


 sudo systemctl restart ssh
sudo systemctl status ssh


ls /etc/systemd/system/sshd.service or ls /usr/lib/systemd/system/sshd.service


sudo systemctl daemon-reload
sudo systemctl status ssh
sudo systemctl restart ssh.service


cat /home/david/.minikube/ca.crt | base64 -w 0; echo


sudo chmod 666 /var/run/docker.sock


sh 'kubectl apply -f deployment.yml --validate=false'
minikube service my-service --url | xargs curl
```

Pipeline codes:

```
pipeline {
agent any

environment {
   DOCKER_CREDENTIALS = credentials('docker-hub-cred')  // Docker Hub
Credentials ID
}
```

```
stages {
    stage('SCM') {
        steps {
            git branch: 'main', url:
'<https://github.com/raswanthsabarish/guvidevopsday1.git>'
        }
    }

    stage('Build') {
        steps {
            sh "mvn clean"
            sh "mvn install"
        }
    }

    stage('Build Docker Image') {
        steps {
            script {
                sh 'docker build -t raswanthsabarish/guvidevopsday1 .'
            }
        }
    }

    stage('Push to Docker Hub') {
        steps {
            script {
                docker.withRegistry('<https://index.docker.io/v1/>', 'docker-hub-cred') {
                    sh 'docker push raswanthsabarish/guvidevopsday1'
                }
            }
        }
    }
}

}
```

```
pipeline {
agent any

stages {
   stage('SCM') {
      steps {
         git branch: 'main', url:
'<https://github.com/raswanthsabarish/DevOps_simple-web-app.git>'
      }
   }
   stage('Build-clean') {
      steps{
         sh 'mvn clean'
      }
   }
stage('Build-validate') {
      steps{
      sh 'mvn validate'
      }
   }
stage('Build-compile') {
      steps{
      sh 'mvn compile'
      }
   }
stage('Build-test') {
      steps{
      sh 'mvn test'
      }
   }
stage('Build-package') {
      steps{
      sh 'mvn package'
      }
   }
   stage('build to images') {
```

```
        steps {
        script{
            sh "docker build -t raswanthsabarish/webapplication ."
        }
        }
    }
    stage('docker push hub') {
        steps {
        script{
            withDockerRegistry(credentialsId: 'cred-2', url:
'<https://index.docker.io/v1/>') {
            sh 'docker push raswanthsabarish/webapplication'
        }
        }
        }
    }
}}
```