

Lab Exercise 7 :- Install Minikube on Linux

(Ubuntu /MacOS/Windows)

Name:- Vansh Bhatt

Sap ID:- 500125395

Batch:- DevOps B1

To:- Hitesh Sharma Sir

Install Minikube on Linux (Ubuntu)

```
sudo apt install -y docker.io # Ubuntu
```

```
sudo systemctl start docker  
sudo systemctl enable docker  
sudo usermod -aG docker $USER  
newgrp docker
```

Step 2: Install kubectl

```
curl -LO https://storage.googleapis.com/kubernetes-release/release/\$\(curl -s https://storage.googleapis.com/kubernetes-release/release/stable.txt\)/bin/linux/amd64/kubectl  
chmod +x kubectl  
sudo mv kubectl /usr/local/bin/
```

Verify:

```
kubectl version --client
```

Step 3: Install Minikube

```
curl -LO https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64  
chmod +x minikube-linux-amd64  
sudo mv minikube-linux-amd64 /usr/local/bin/minikube
```

Verify:

```
minikube version
```

Step 4: Start Minikube

```
minikube start --driver=docker
```

Check status:

```
minikube status
```

Install Minikube on Windows

Prerequisites

- Docker Desktop installed
- Enable WSL2

Install Minikube

```
choco install minikube -y
```

OR download exe:

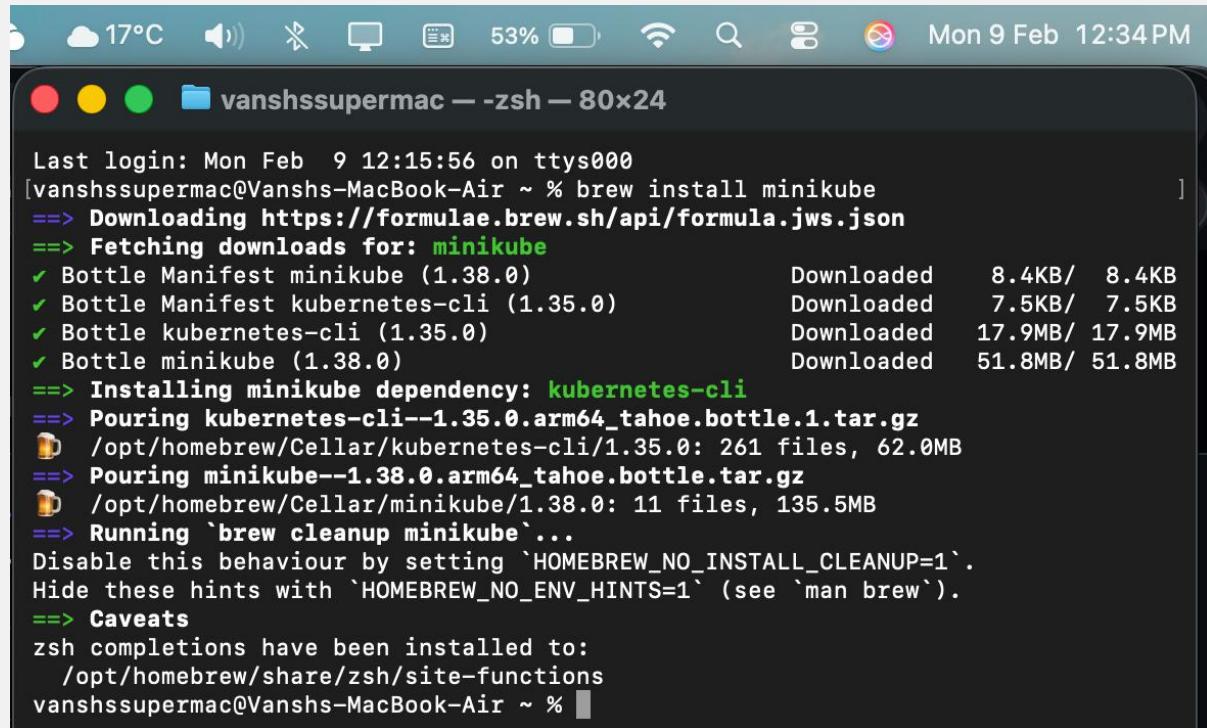
```
https://github.com/kubernetes/minikube/releases/latest
```

Start:

```
minikube start
```

Install Minikube on macOS

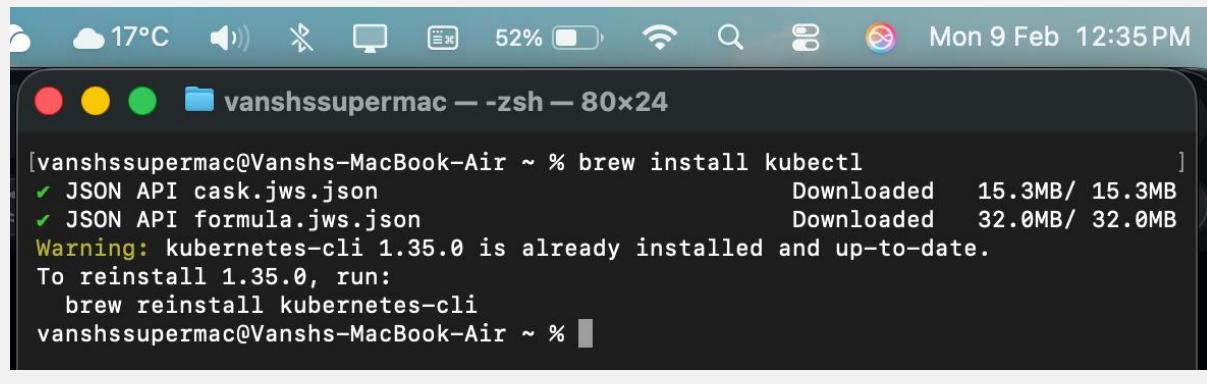
```
brew install minikube
```



The screenshot shows a macOS desktop environment with a terminal window open. The terminal title is "vanshssupermac — zsh — 80x24". The system tray at the top shows the date as "Mon 9 Feb 12:34 PM". The terminal output shows the process of installing minikube via Homebrew. It includes steps for downloading dependencies like Kubernetes CLI and minikube itself, and a warning about cleanup behavior.

```
Last login: Mon Feb  9 12:15:56 on ttys000
[vanshssupermac@Vanshs-MacBook-Air ~ % brew install minikube
==> Downloading https://formulae.brew.sh/api/formula.jws.json
==> Fetching downloads for: minikube
✓ Bottle Manifest minikube (1.38.0)                                Downloaded    8.4KB/  8.4KB
✓ Bottle Manifest kubernetes-cli (1.35.0)                            Downloaded    7.5KB/  7.5KB
✓ Bottle kubernetes-cli (1.35.0)                                Downloaded   17.9MB/ 17.9MB
✓ Bottle minikube (1.38.0)                                Downloaded   51.8MB/ 51.8MB
==> Installing minikube dependency: kubernetes-cli
==> Pouring kubernetes-cli--1.35.0.arm64_tahoe.bottle.1.tar.gz
🍺 /opt/homebrew/Cellar/kubernetes-cli/1.35.0: 261 files, 62.0MB
==> Pouring minikube--1.38.0.arm64_tahoe.bottle.tar.gz
🍺 /opt/homebrew/Cellar/minikube/1.38.0: 11 files, 135.5MB
==> Running `brew cleanup minikube`...
Disable this behaviour by setting `HOMEBREW_NO_INSTALL_CLEANUP=1`.
Hide these hints with `HOMEBREW_NO_ENV_HINTS=1` (see `man brew`).
==> Caveats
zsh completions have been installed to:
  /opt/homebrew/share/zsh/site-functions
vanshssupermac@Vanshs-MacBook-Air ~ %
```

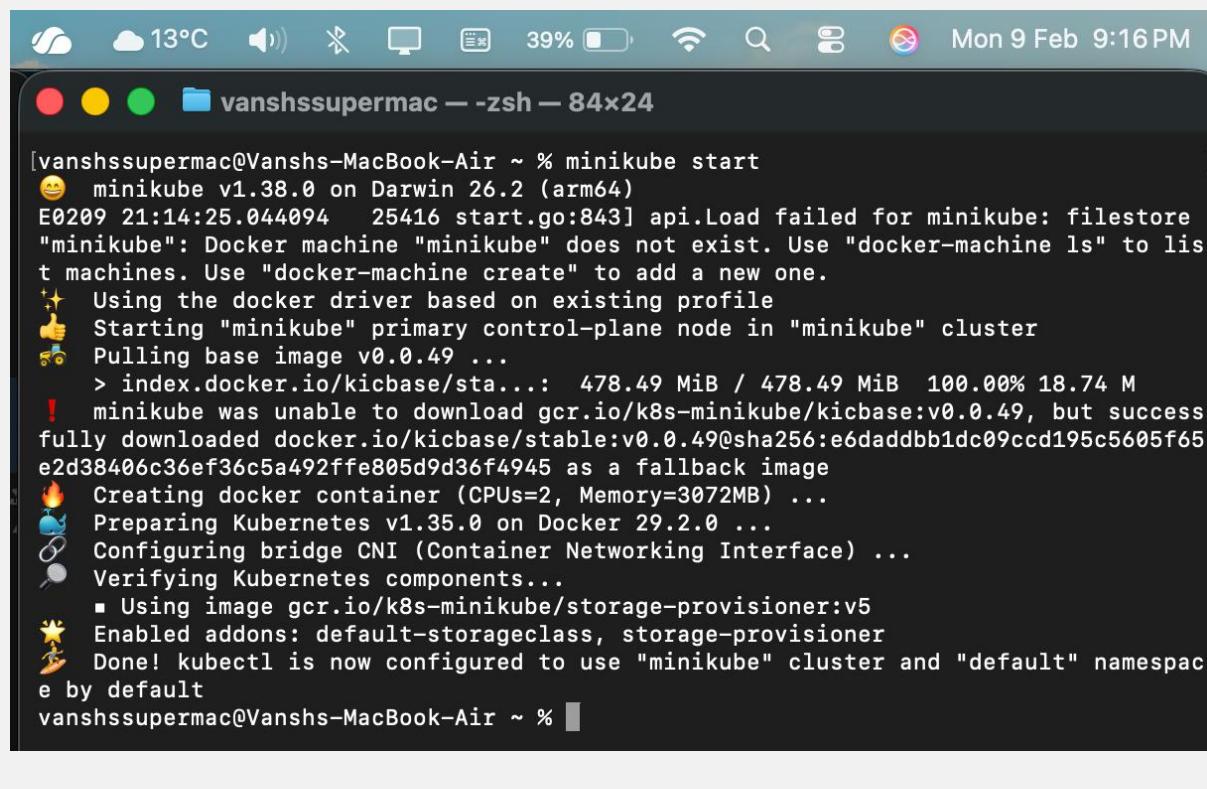
```
brew install kubectl
```



```
[vanshssupermac@Vanshs-MacBook-Air ~ % brew install kubectl
✓ JSON API cask.jws.json Downloaded 15.3MB/ 15.3MB
✓ JSON API formula.jws.json Downloaded 32.0MB/ 32.0MB
Warning: kubernetes-cli 1.35.0 is already installed and up-to-date.
To reinstall 1.35.0, run:
  brew reinstall kubernetes-cli
vanshssupermac@Vanshs-MacBook-Air ~ % ]
```

Start:

```
minikube start
```



```
[vanshssupermac@Vanshs-MacBook-Air ~ % minikube start
😊 minikube v1.38.0 on Darwin 26.2 (arm64)
E0209 21:14:25.044094 25416 start.go:843] api.Load failed for minikube: filestore
"minikube": Docker machine "minikube" does not exist. Use "docker-machine ls" to list machines. Use "docker-machine create" to add a new one.
🌟 Using the docker driver based on existing profile
👍 Starting "minikube" primary control-plane node in "minikube" cluster
🔗 Pulling base image v0.0.49 ...
> index.docker.io/kicbase/sta...: 478.49 MiB / 478.49 MiB 100.00% 18.74 M
❗ minikube was unable to download gcr.io/k8s-minikube/kicbase:v0.0.49, but successfully downloaded docker.io/kicbase/stable:v0.0.49@sha256:e6daddbb1dc09ccd195c560f65e2d38406c36ef36c5a492ffe805d9d36f4945 as a fallback image
🔥 Creating docker container (CPUs=2, Memory=3072MB) ...
🌐 Preparing Kubernetes v1.35.0 on Docker 29.2.0 ...
🔗 Configuring bridge CNI (Container Networking Interface) ...
🌐 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
vanshssupermac@Vanshs-MacBook-Air ~ % ]
```

Verify Kubernetes Cluster

```
kubectl get nodes
```

Expected output:

| NAME | STATUS | ROLES | AGE | VERSION |
|----------|--------|---------------|-----|---------|
| minikube | Ready | control-plane | xx | v1.xx |

```
[vanshssupermac@Vanshs-MacBook-Air ~ % kubectl get nodes
NAME      STATUS   ROLES      AGE      VERSION
minikube  Ready    control-plane  60s     v1.35.0
vanshssupermac@Vanshs-MacBook-Air ~ %
```

Useful Minikube Commands (Lab Ready)

| Command | Purpose |
|---------------------|----------------|
| minikube dashboard | Open K8s UI |
| minikube stop | Stop cluster |
| minikube delete | Delete cluster |
| minikube ssh | Access node |
| kubectl get pods -A | View all pods |

Thank You