

Task Description:

Setup minikube at your local and explore creating namespaces (Go through official documentation).

```
404 Not Found [IP: 142.250.71.110 443]
Reading package lists... Done
E: The repository 'https://apt.kubernetes.io kubernetes-stable Release' does not have a Release file.
N: Updating from such a repository can't be done securely, and is discouraged by default.
N: See apt-secure(8) manpage for repository creation and user configuration details.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
E: Unable to locate package kubect1
ashok@ashok:~/Desktop$ sudo snap install kubect1 --classic
kubect1 1.33.2 from Canonical✓ installed
ashok@ashok:~/Desktop$ kubect1 version --client
Client Version: v1.33.2
Kustomize Version: v5.6.0
ashok@ashok:~/Desktop$ curl -LO https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64
ashok@ashok:~/Desktop$ sudo apt install -y docker.io
sudo usermod -aG docker $USER
newgrp docker
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  bridge-utils containerd pigz runc ubuntu-fan
Suggested packages:
  ifupdown aufs-tools btrfs-progs cgroupfs-mount | cgroup-lite debootstrap docker-buildx docker-compose-v2 docker-doc rinse
The following NEW packages will be installed:
  bridge-utils containerd docker.io pigz runc ubuntu-fan
0 upgraded, 6 newly installed, 0 to remove and 197 not upgraded.
Need to get 78.9 MB of archives.
After this operation, 299 MB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu noble/universe amd64 pigz amd64 2.8-1 [65.6 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu noble/main amd64 bridge-utils amd64 1.7.1-1ubuntu2 [33.9 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 runc amd64 1.2.5-0ubuntu1~24.04.1 [8,043 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 containerd amd64 1.7.27-0ubuntu1~24.04.1 [37.7 MB]
39% [4 containerd 20.8 MB/37.7 MB 55%]
ashok@ashok:~/Desktop$ curl -LO https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64
sudo install minikube-linux-amd64 /usr/local/bin/minikube
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
 78  126M  78 99.7M    0     0  2529k      0  0:00:51  0:00:40  0:00:11 3050k
100  126M 100 126M    0     0  2562k      0  0:00:50  0:00:50 --:--:-- 3039k
ashok@ashok:~/Desktop$ minikube version
minikube version: v1.36.0
commit: f8f52f5de11fc6ad8244afac475e1d0f96841df1-dirty
ashok@ashok:~/Desktop$
```

```
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /usr/lib/systemd/system/docker.service.  
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /usr/lib/systemd/system/docker.socket.  
Processing triggers for man-db (2.12.0-4build2) ...
```

```
ashok@ashok:~/Desktop$ docker version
```

```
Client:
```

```
Version:      27.5.1  
API version:  1.47  
Go version:   go1.22.2  
Git commit:   27.5.1-0ubuntu3~24.04.2  
Built:        Mon Jun  2 11:51:53 2025  
OS/Arch:      linux/amd64  
Context:      default
```

```
Server:
```

```
Engine:  
Version:      27.5.1  
API version:  1.47 (minimum version 1.24)  
Go version:   go1.22.2  
Git commit:   27.5.1-0ubuntu3~24.04.2  
Built:        Mon Jun  2 11:51:53 2025  
OS/Arch:      linux/amd64  
Experimental: false  
containerd:  
Version:      1.7.27  
GitCommit:      
runc:  
Version:      1.2.5-0ubuntu1~24.04.1  
GitCommit:      
docker-init:  
Version:      0.19.0  
GitCommit:      
ashok@ashok:~/Desktop$
```

```
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```
ashok@ashok:~/Desktop$ kubectl get namespaces
```

NAME	STATUS	AGE
default	Active	4m1s
dev-ns	Active	22s
kube-node-lease	Active	4m
kube-public	Active	4m1s
kube-system	Active	4m1s
test-ns	Active	87s

```
ashok@ashok:~/Desktop$ kubectl apply -f namespace.yaml
```

```
namespace/dev-ns created
```

```
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```

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```
ashok@ashok:~/Desktop$ kubectl create namespace test-ns
```

```
namespace/test-ns created
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OS/Arch:      linux/amd64
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containerd:
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docker-init:
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ashok@ashok:~/Desktop$ minikube start --driver=docker
🐳 minikube v1.36.0 on Ubuntu 24.04 (vbox/amd64)
🔧 Using the docker driver based on user configuration
👉 Using Docker driver with root privileges
👍 Starting "minikube" primary control-plane node in "minikube" cluster
📶 Pulling base image v0.0.47 ...
📦 Downloading Kubernetes v1.33.1 preload ...
> preloaded-images-k8s-v18-v1...: 347.04 MiB / 347.04 MiB 100.00% 2.79 Mi
> gcr.io/k8s-minikube/kicbase...: 502.26 MiB / 502.26 MiB 100.00% 2.58 Mi
🔥 Creating docker container (CPUs=2, Memory=2600MB) ...
📦 Preparing Kubernetes v1.33.1 on Docker 28.1.1 ...
  ▪ Generating certificates and keys ...
  ▪ Booting up control plane ...
  ▪ Configuring RBAC rules ...
🔗 Configuring bridge CNI (Container Networking Interface) ...
🔍 Verifying Kubernetes components...
  ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
E0629 15:59:58.826783 10109 start.go:160] Unable to scale down deployment "coredns" in namespace "kube-system" to 1
Operation cannot be fulfilled on deployments.apps "coredns": the object has been modified; please apply your changes
🌟 Enabled addons: storage-provisioner, default-storageclass
🏁 Done! kubectrl is now configured to use "minikube" cluster and "default" namespace by default

Go version:      go1.22.2
Git commit:      27.5.1-0ubuntu3~24.04.2
Built:           Mon Jun 2 11:51:53 2025
OS/Arch:         linux/amd64
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> preloaded-images-k8s-v18-v1...: 22.78 MiB / 347.04 MiB 6.56% 2.13 MiB p
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