

1. Create a pod using file method:-

- Image name = nginx
- Pod name = myapp
- Set label on pod --- app=website
- Define containerport property in spec section
- Container name = mysecondcontainer

2. Create a pod using file method:-

- Image name = ubuntu
- Pod name = sleeper
- Set label on pod --- app=sleeper
- Container name = mythirdcontainer
- command should be run at the time of pod starting === sleep 10000
- make sure container is in running state

3. Create a pod using file method:-

- image name = mysql
- Pod name = mydb
- Set label on pod --- app=database
- Container name = container4
- Make sure container is in running state
- Define containerport property in spec section

4. Perform action on previously created pod named container4:-

- Get a shell into container and login to database
- Create a DB user named tgindia
- Allow super user permission to tgindia user
- Create a database named Kubernetes

- Make sure tgindia db user should have full access on all databases and tables

5. Perform action on previously created pod named mysecondcontainer:-

- Get a shell into container
- Create a index.html file in document root and this file should contains a line "I am a Kubernetes Engineer"
- On your machine curl pod's ip and this line should print "I am a Kubernetes Engineer"

6. Perform action on previously created pod named myfirstcontainter:-

- create an index.html file on your machine and write a line "I am a DevOps engineer"
- copy this index.html at document root location into pod
- on your machine, curl pod's ip and it should print a line "I am a DevOps engineer"

7. Create a pod using file method:-

- Pod name = nonstoppod
- Image name = alpine
- Set label on pod --- app=nonstop
- Container name = autorestart
- Set a restart policy on pod = always
- command should be run at the time of pod starting === sleep 15
- make sure this pod will restart in every 15 seconds (you can use watch command for live check)

8. Check which pod is using the most ram in cluster and on which machine that pod is running

9. Check how many numbers of pod is running in your cluster in all namespaces

10. Check the log of pod named mysecondcontainer and save those logs in /tmp/2log file

11. Describe pod named mydb and check Events section, save that section in a file /tmp/dbevent file

12. Check the status of node which are running in your cluster:-

- Check the cluster version and save into a file /tmp/clusterversion.txt
- Check the label of master node machine and save all labels in /tmp/controlplane-label.txt file

13. Describe all the worker node and check which node have less cpu and available ram

14. Check the worker node capacity and allocatable resources