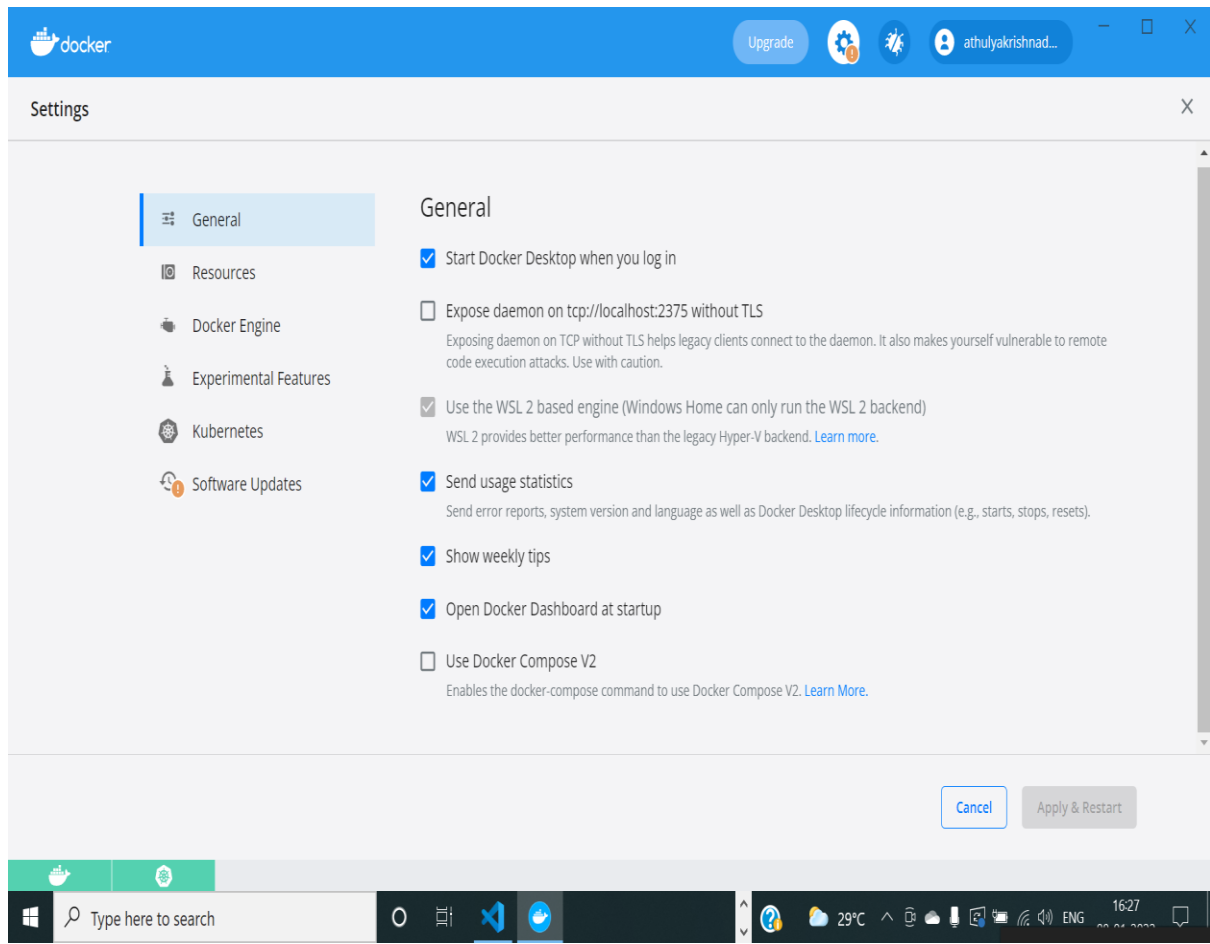
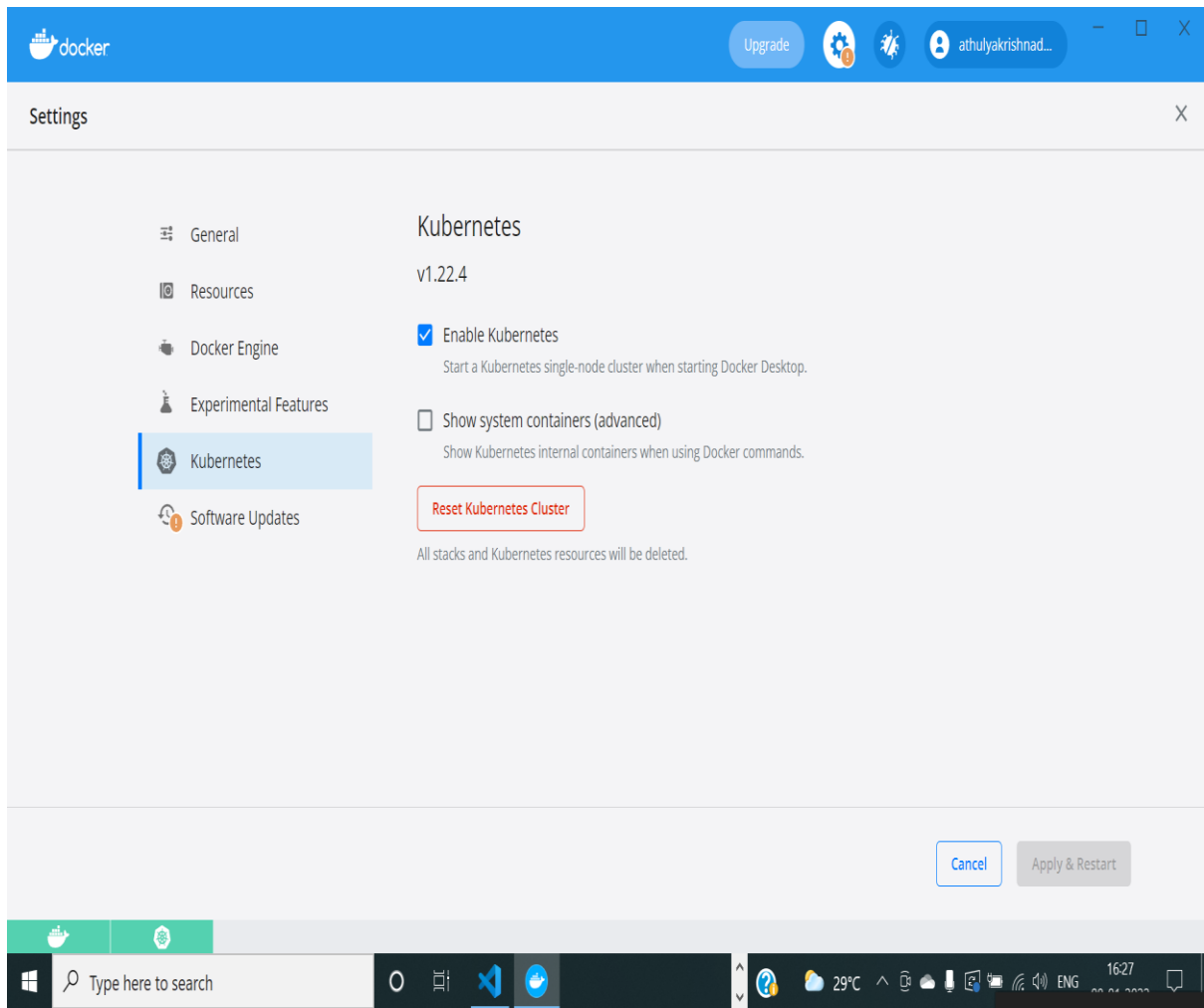


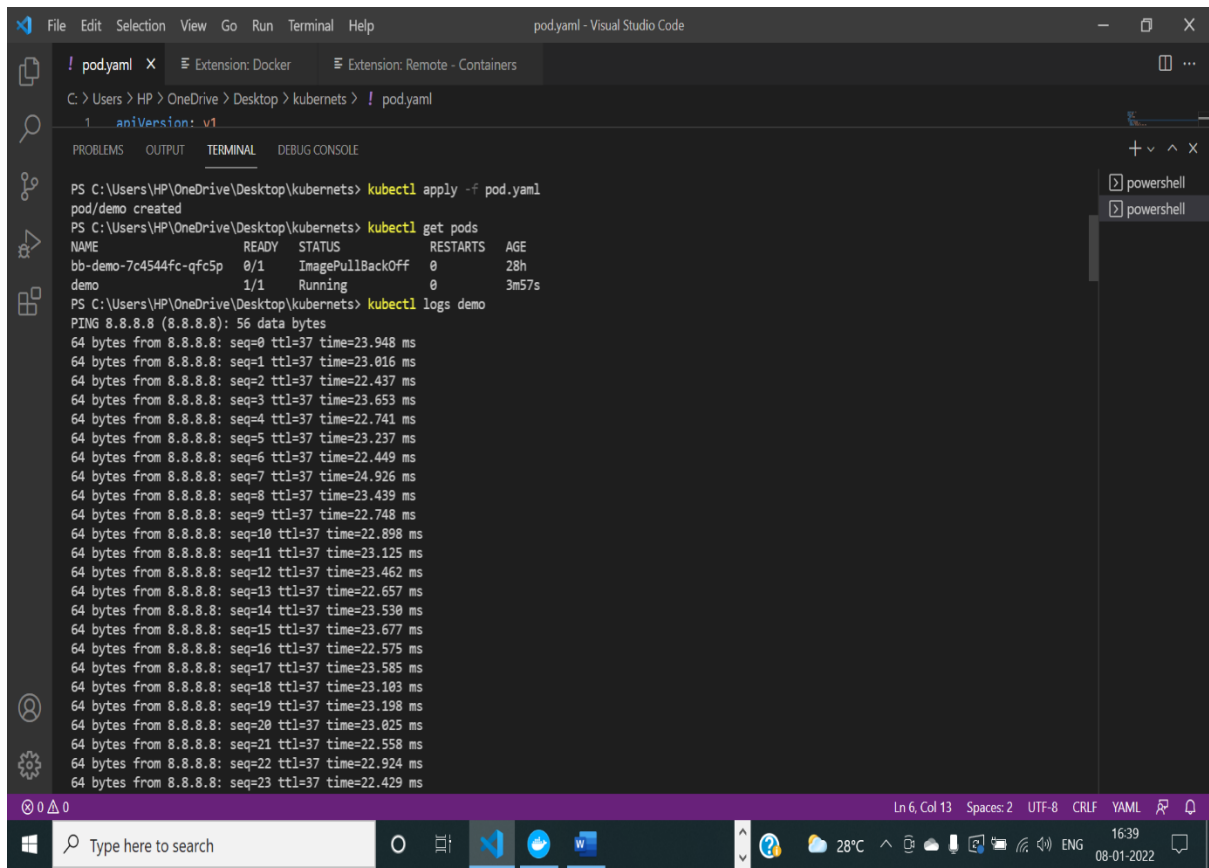
Enable Kubernetes





Pod.yaml

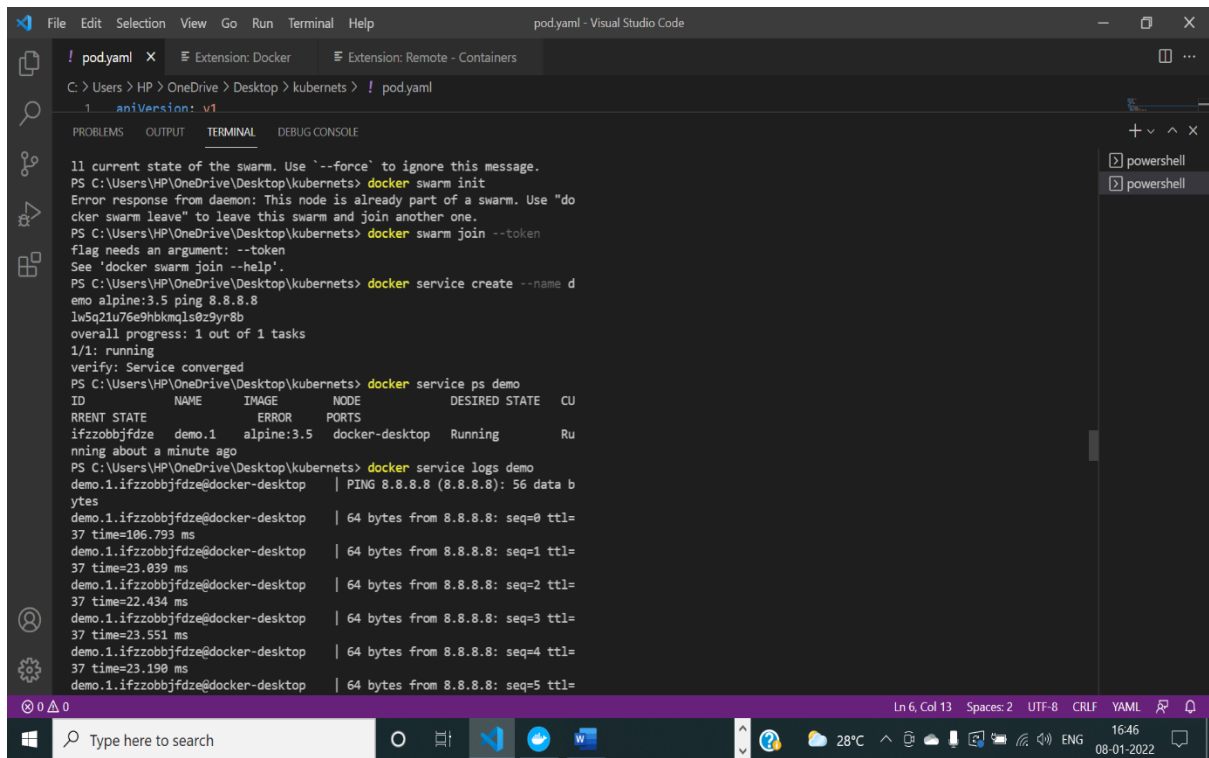
```
apiVersion: v1
kind: Pod
metadata:
  name: demo
spec:
  containers:
  - name: testpod
    image: alpine:3.5
    command: ["ping", "8.8.8.8"]
```



The screenshot shows a Visual Studio Code window with a terminal running several Kubernetes commands. The file editor shows a file named `pod.yaml` with the content `apiVersion: v1`. The terminal output shows the following commands and their results:

```
PS C:\Users\HP\OneDrive\Desktop\kubernetes> kubectl apply -f pod.yaml
pod/demo created
PS C:\Users\HP\OneDrive\Desktop\kubernetes> kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
bb-demo-7c4544fc-qfc5p  0/1     ImagePullBackOff    0          28h
demo           1/1     Running              0          3m57s
PS C:\Users\HP\OneDrive\Desktop\kubernetes> kubectl logs demo
PING 8.8.8.8 (8.8.8.8): 56 data bytes
64 bytes from 8.8.8.8: seq=0 ttl=37 time=23.948 ms
64 bytes from 8.8.8.8: seq=1 ttl=37 time=23.016 ms
64 bytes from 8.8.8.8: seq=2 ttl=37 time=22.437 ms
64 bytes from 8.8.8.8: seq=3 ttl=37 time=23.653 ms
64 bytes from 8.8.8.8: seq=4 ttl=37 time=22.741 ms
64 bytes from 8.8.8.8: seq=5 ttl=37 time=23.237 ms
64 bytes from 8.8.8.8: seq=6 ttl=37 time=22.449 ms
64 bytes from 8.8.8.8: seq=7 ttl=37 time=24.926 ms
64 bytes from 8.8.8.8: seq=8 ttl=37 time=23.439 ms
64 bytes from 8.8.8.8: seq=9 ttl=37 time=22.748 ms
64 bytes from 8.8.8.8: seq=10 ttl=37 time=22.898 ms
64 bytes from 8.8.8.8: seq=11 ttl=37 time=23.125 ms
64 bytes from 8.8.8.8: seq=12 ttl=37 time=23.462 ms
64 bytes from 8.8.8.8: seq=13 ttl=37 time=22.657 ms
64 bytes from 8.8.8.8: seq=14 ttl=37 time=23.530 ms
64 bytes from 8.8.8.8: seq=15 ttl=37 time=23.677 ms
64 bytes from 8.8.8.8: seq=16 ttl=37 time=22.575 ms
64 bytes from 8.8.8.8: seq=17 ttl=37 time=23.585 ms
64 bytes from 8.8.8.8: seq=18 ttl=37 time=23.103 ms
64 bytes from 8.8.8.8: seq=19 ttl=37 time=23.198 ms
64 bytes from 8.8.8.8: seq=20 ttl=37 time=23.025 ms
64 bytes from 8.8.8.8: seq=21 ttl=37 time=22.558 ms
64 bytes from 8.8.8.8: seq=22 ttl=37 time=22.924 ms
64 bytes from 8.8.8.8: seq=23 ttl=37 time=22.429 ms
```

Enable docker swarm



The screenshot shows a Visual Studio Code window with a terminal running several Docker Swarm commands. The file editor shows a file named `pod.yaml` with the content `apiVersion: v1`. The terminal output shows the following commands and their results:

```
PS C:\Users\HP\OneDrive\Desktop\kubernetes> docker swarm init
Error response from daemon: This node is already part of a swarm. Use "docker swarm leave" to leave this swarm and join another one.
PS C:\Users\HP\OneDrive\Desktop\kubernetes> docker swarm join --token
flag needs an argument: --token
See 'docker swarm join --help'.
PS C:\Users\HP\OneDrive\Desktop\kubernetes> docker service create --name demo alpine:3.5 ping 8.8.8.8
1w5q21u76e9hbkmls0z9yr8b
overall progress: 1 out of 1 tasks
1/1: running
verify: Service converged
PS C:\Users\HP\OneDrive\Desktop\kubernetes> docker service ps demo
ID            NAME          IMAGE          NODE          DESIRED STATE   CURRENT STATE    CO
RRENT STATE
ifzzobbjfdze  demo.1        alpine:3.5     docker-desktop Running         Running about a minute ago
PS C:\Users\HP\OneDrive\Desktop\kubernetes> docker service logs demo
demo.1.ifzzobbjfdze@docker-desktop | PING 8.8.8.8 (8.8.8.8): 56 data bytes
demo.1.ifzzobbjfdze@docker-desktop | 64 bytes from 8.8.8.8: seq=0 ttl=37 time=106.793 ms
demo.1.ifzzobbjfdze@docker-desktop | 64 bytes from 8.8.8.8: seq=1 ttl=37 time=23.039 ms
demo.1.ifzzobbjfdze@docker-desktop | 64 bytes from 8.8.8.8: seq=2 ttl=37 time=22.434 ms
demo.1.ifzzobbjfdze@docker-desktop | 64 bytes from 8.8.8.8: seq=3 ttl=37 time=23.551 ms
demo.1.ifzzobbjfdze@docker-desktop | 64 bytes from 8.8.8.8: seq=4 ttl=37 time=23.198 ms
demo.1.ifzzobbjfdze@docker-desktop | 64 bytes from 8.8.8.8: seq=5 ttl=
```

Deploy in to Kubernetes

bb.yaml

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: bb-demo
  namespace: default
spec:
  replicas: 1
  selector:
    matchLabels:
      bb: web
  template:
    metadata:
      labels:
        bb: web
    spec:
      containers:
        - name: bb-site
          image: getting-started
---
apiVersion: v1
kind: Service
metadata:
  name: bb-entriypoint
  namespace: default
spec:
  type: NodePort
  selector:
    bb: web
  ports:
    - port: 3000
      targetPort: 3000
      nodePort: 30001
```

The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the following commands and output:

```
C:\Users\HP> OneDrive\Desktop\kubernetes> ! bb.yaml
1  apiVersion: apps/v1
2  kind: Deployment
3  metadata:

deployment.apps/bb-demo unchanged
service/bb-entrypoint unchanged
PS C:\Users\HP\OneDrive\Desktop\kubernetes> kubectl get deployments
NAME      READY   UP-TO-DATE   AVAILABLE   AGE
bb-demo   0/1     1            0           28h
PS C:\Users\HP\OneDrive\Desktop\kubernetes> kubectl get services
NAME            TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)          AGE
bb-entrypoint   NodePort    10.111.22.29 <none>        3000:30001/TCP   29h
kubernetes      ClusterIP   10.96.0.1    <none>        443/TCP          47h
PS C:\Users\HP\OneDrive\Desktop\kubernetes> kubectl apply -f bb.yaml
deployment.apps/bb-demo unchanged
service/bb-entrypoint unchanged
PS C:\Users\HP\OneDrive\Desktop\kubernetes> kubectl get deployments
NAME      READY   UP-TO-DATE   AVAILABLE   AGE
bb-demo   0/1     1            0           29h
PS C:\Users\HP\OneDrive\Desktop\kubernetes> kubectl get services
NAME            TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)          AGE
bb-entrypoint   NodePort    10.111.22.29 <none>        3000:30001/TCP   29h
kubernetes      ClusterIP   10.96.0.1    <none>        443/TCP          47h
PS C:\Users\HP\OneDrive\Desktop\kubernetes> kubectl delete -f bb.yaml
deployment.apps "bb-demo" deleted
service "bb-entrypoint" deleted
PS C:\Users\HP\OneDrive\Desktop\kubernetes>
```

