1.) You're managing a Kubernetes cluster and overseeing a Deployment named mischievous-deployment that deploys a nginx container across three replicas. After careful observation you found that one of the pods is utilizing more memory than expected which is causing a performance degradation, what changes you'll make for the below manifest file for optimal resource utilization?

```
apiVersion: apps/v1
kind: Deployment
metadata:
name: mischievous-deployment
spec:
 replicas: 3
selector:
  matchLabels:
   app: nginx
template:
  metadata:
   labels:
    app: nginx
  spec:
   containers:
   - name: nginx
    image: nginx:latest
    resources:
     requests:
      memory: "64Mi"
      cpu: "50m"
     limits:
      memory: "128Mi"
      cpu: "100m"
```

2.) During an attempt to access www.facebook.com on my device, I consistently encounter a
'connection failed' message. Interestingly, another device on the same network faces no such issue.
What could be causing this error, and what troubleshooting steps would you recommend addressing
this connectivity challenge?

It seems like you're experiencing a connectivity issue when trying to access Facebook on your device. The fact that another device on the same network doesn't have this problem suggests that the issue might be specific to your device. Here are a few troubleshooting steps you can try:

- 1. Restart your device and try accessing Facebook again.
- 2. Check your internet connection to ensure it's stable and working properly.
- 3. Clear your browser cache and cookies, then try accessing Facebook again.
- 4. Disable any VPN or proxy settings that might be interfering with the connection.
- 5. If possible, try accessing Facebook using a different browser or device to see if the issue persists.
- 3.) Explain all the underlined items from the below screenshot.
- "df": Stands for "disk free" and is used to display information about disk space usage.
- "-h": This option is used to display sizes in a human-readable format.
- "-y": This option is not a standard option for the df command. It's possible that it might be a custom alias or function set up on your system.