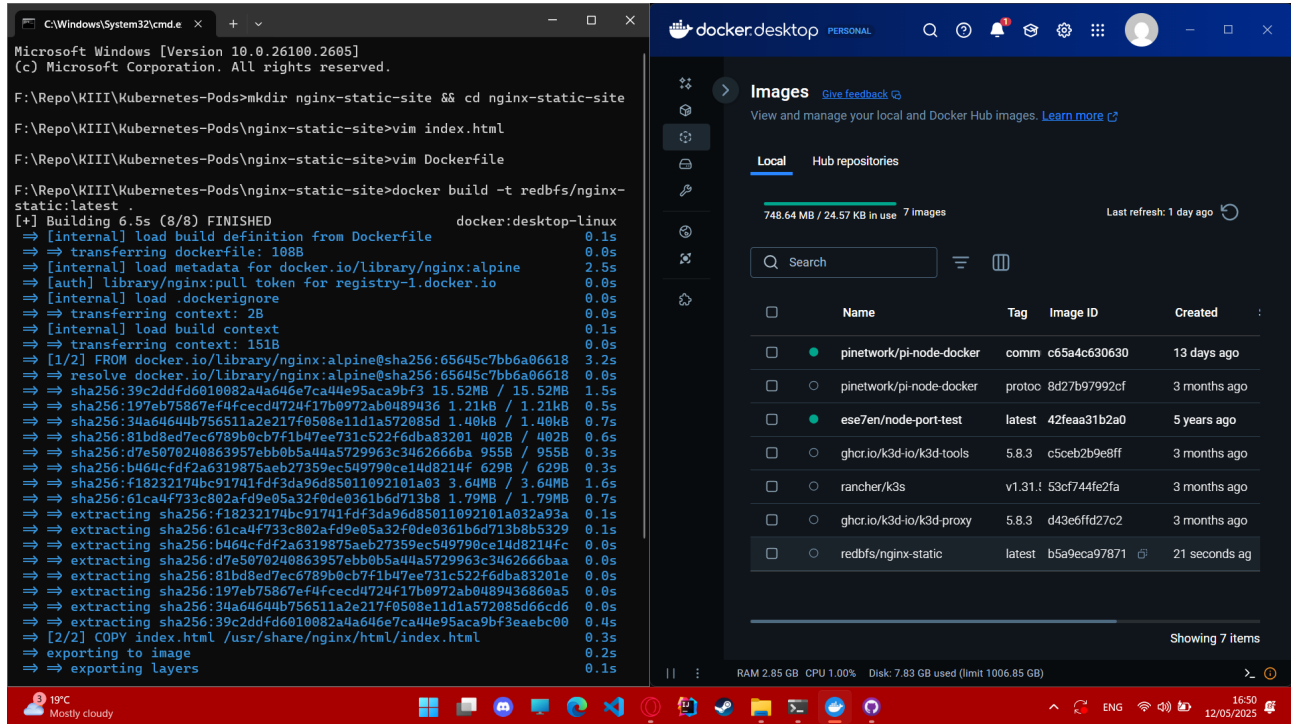
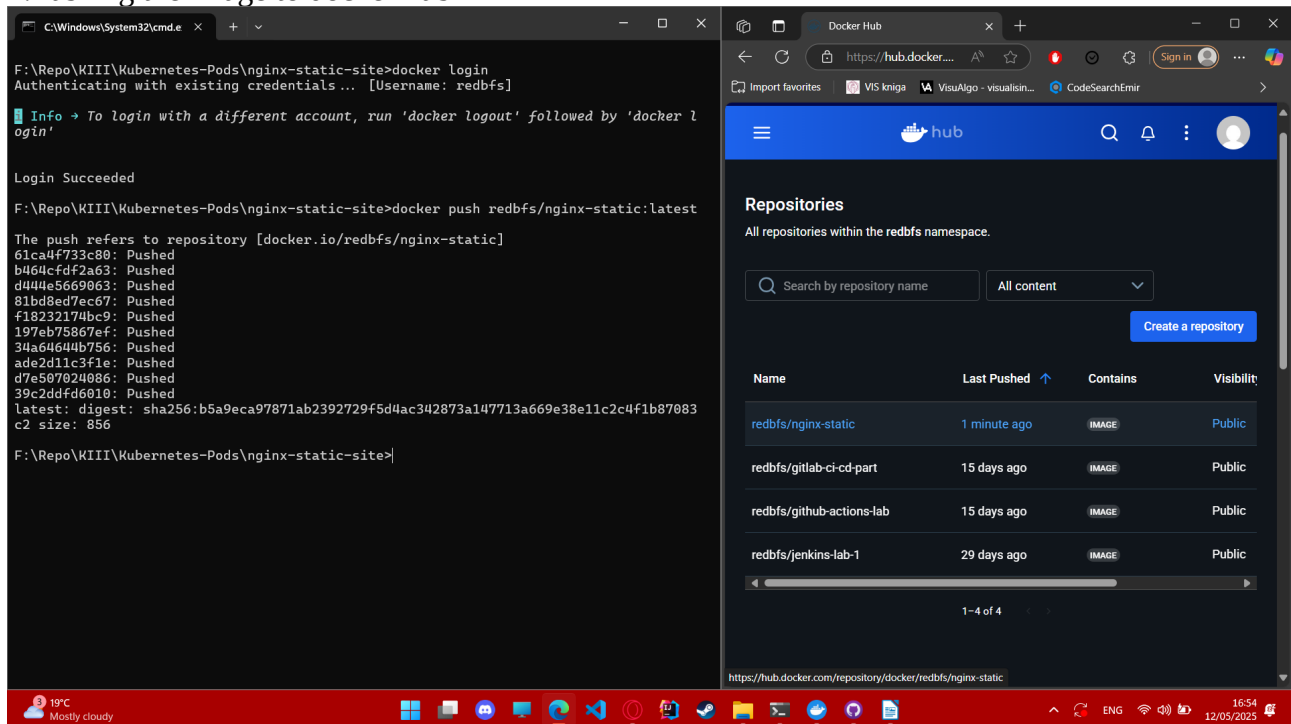


# Kuberetes Pods

## 1. Making an html&Dockerfile and building the image for nginx



## 2.Pushing the image to docker hub



### 3. Writing the manifest

```
nginx-pod.yaml + (F:\Repo\KI) x + v - □ x
apiVersion: v1
kind: Pod
metadata:
  name: nginx-static-pod
spec:
  containers:
  - name: nginx
    image: redbfs/nginx-static:latest
    ports:
    - containerPort: 80_
```

### 4. Created the cluster and applied the manifest

```
C:\Windows\System32\cmd.e x + v - □ x
INFO[0002] Creating node 'k3d-labcluster-server-2'
INFO[0002] Creating node 'k3d-labcluster-agent-0'
INFO[0002] Creating node 'k3d-labcluster-agent-1'
INFO[0002] Creating node 'k3d-labcluster-agent-2'
INFO[0003] Creating node 'k3d-labcluster-agent-3'
INFO[0003] Creating node 'k3d-labcluster-agent-4'
INFO[0004] Creating LoadBalancer 'k3d-labcluster-serverlb'
INFO[0004] Using the k3d-tools node to gather environment information
INFO[0004] Starting new tools node ...
INFO[0005] Starting node 'k3d-labcluster-tools'
INFO[0006] Starting cluster 'labcluster'
INFO[0006] Starting the initializing server ...
INFO[0006] Starting node 'k3d-labcluster-server-0'
INFO[0010] Starting servers ...
INFO[0010] Starting node 'k3d-labcluster-server-1'
INFO[0030] Starting node 'k3d-labcluster-server-2'
INFO[0067] Starting agents ...
INFO[0067] Starting node 'k3d-labcluster-agent-2'
INFO[0067] Starting node 'k3d-labcluster-agent-0'
INFO[0067] Starting node 'k3d-labcluster-agent-3'
INFO[0067] Starting node 'k3d-labcluster-agent-1'
INFO[0067] Starting node 'k3d-labcluster-agent-4'
INFO[0077] Starting helpers ...
INFO[0077] Starting node 'k3d-labcluster-serverlb'
INFO[0085] Injecting records for hostAliases (incl. host.k3d.internal) and for 10 network members into CoreDNS configmap ...
INFO[0088] Cluster 'labcluster' created successfully!
INFO[0088] You can now use it like this:
kubectl cluster-info
F:\Repo\KIII\Kubernetes-Pods\nginx-static-site>kubectl apply -f nginx-pod.yaml
pod/nginx-static-pod created
F:\Repo\KIII\Kubernetes-Pods\nginx-static-site>
```

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## 5.The Pod is running

```
C:\Windows\System32\cmd.e x + v

F:\Repo\KIII\Kubernetes-Pods\nginx-static-site>kubectl get pods -w
NAME          READY   STATUS    RESTARTS   AGE
nginx-static-pod 1/1     Running   0           58s
```

## 6. Watching the event in node **k3d-labcluster-server-0** → **kubectl describe node k3d-labcluster-server-0**

```
C:\Windows\System32\cmd.e x + v

ProviderID: k3s://k3d-labcluster-server-0
Non-terminated Pods: (4 in total)
  Namespace      Name
  kube-system    coredns-ccb96694c-46hps
  kube-system    local-path-provisioner-5cf85fd84d-bkc69
  kube-system    metrics-server-5985cbc9d7-46rrq
  kube-system    svc-lb-traefik-8924d713-82w7q
Allocated resources:
(Total limits may be over 100 percent, i.e., overcommitted.)
Resource      Requests    Limits
cpu            200m (2%)   0 (0%)
memory         140Mi (1%)  170Mi (2%)
ephemeral-storage 0 (0%)      0 (0%)
hugepages-1Gi  0 (0%)      0 (0%)
hugepages-2Mi  0 (0%)      0 (0%)

Events:
Type      Reason              Age           From          Message
Normal    Starting            5m15s        kube-proxy    Updated Node Allocatable limit across pods
Normal    NodeAllocatableEnforced 5m21s        kubelet       The tmpfs noswap option is not supported. Memory-backed volumes
Warning   PossibleMemoryBackedVolumesOnDisk 5m21s        kubelet       secure.
Normal    Starting            5m21s        kubelet       Starting kubelet.
Warning   CgroupV1            5m21s        kubelet       Cgroup v1 support is in maintenance mode, please migrate to Cgro
up v2.
Warning   InvalidDiskCapacity 5m21s        kubelet       invalid capacity 0 on image filesystem
Normal    NodeHasSufficientMemory 5m20s (x2 over 5m21s) kubelet       Node k3d-labcluster-server-0 status is now: NodeHasSufficientMem
Normal    NodeHasNoDiskPressure 5m20s (x2 over 5m21s) kubelet       Node k3d-labcluster-server-0 status is now: NodeHasNoDiskPressur
Normal    NodeHasSufficientPID 5m20s (x2 over 5m21s) kubelet       Node k3d-labcluster-server-0 status is now: NodeHasSufficientPID
Normal    NodeReady           5m20s        kubelet       Node k3d-labcluster-server-0 status is now: NodeReady
Normal    NodePasswordValidationComplete 5m16s        k3s-supervisor Deferred node password secret validation complete
Normal    RegisteredNode       5m15s        node-controller Node k3d-labcluster-server-0 event: Registered Node k3d-labclust
er-server-0 in Controller
Normal    Synced              5m14s        cloud-node-controller Node synced successfully

F:\Repo\KIII\Kubernetes-Pods\nginx-static-site>kubectl describe node k3d-labcluster-server-0
```