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Term: Winter 2024
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BCDV 4032 – Building scalable blockchain applications

lab-2

Section 1 – Full-stack Ethereum using Docker containers

Video: in the lab-2 folder

Section-2- – Kubernetes and Minikube Installation Screenshots

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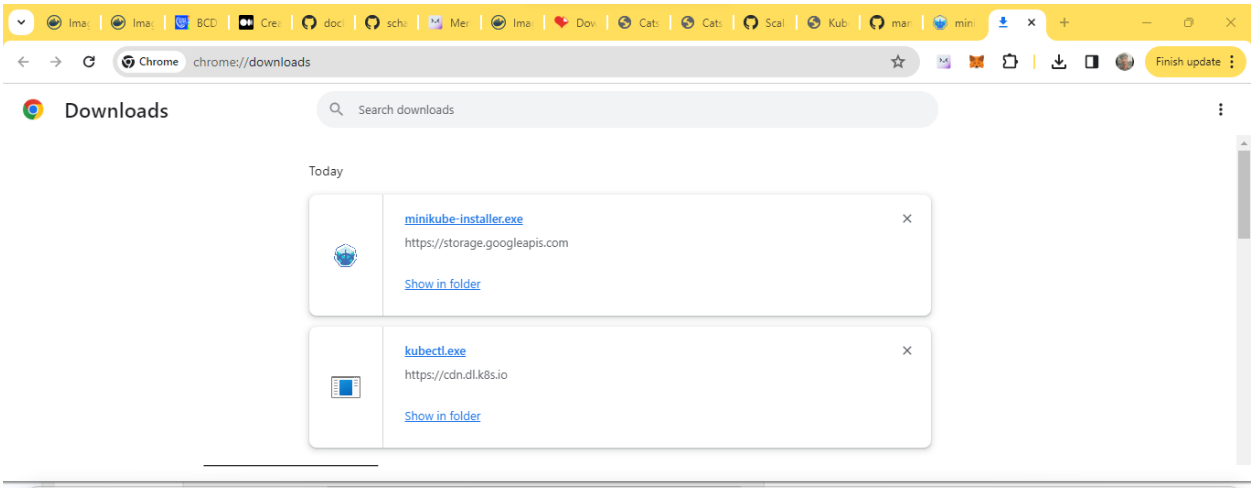

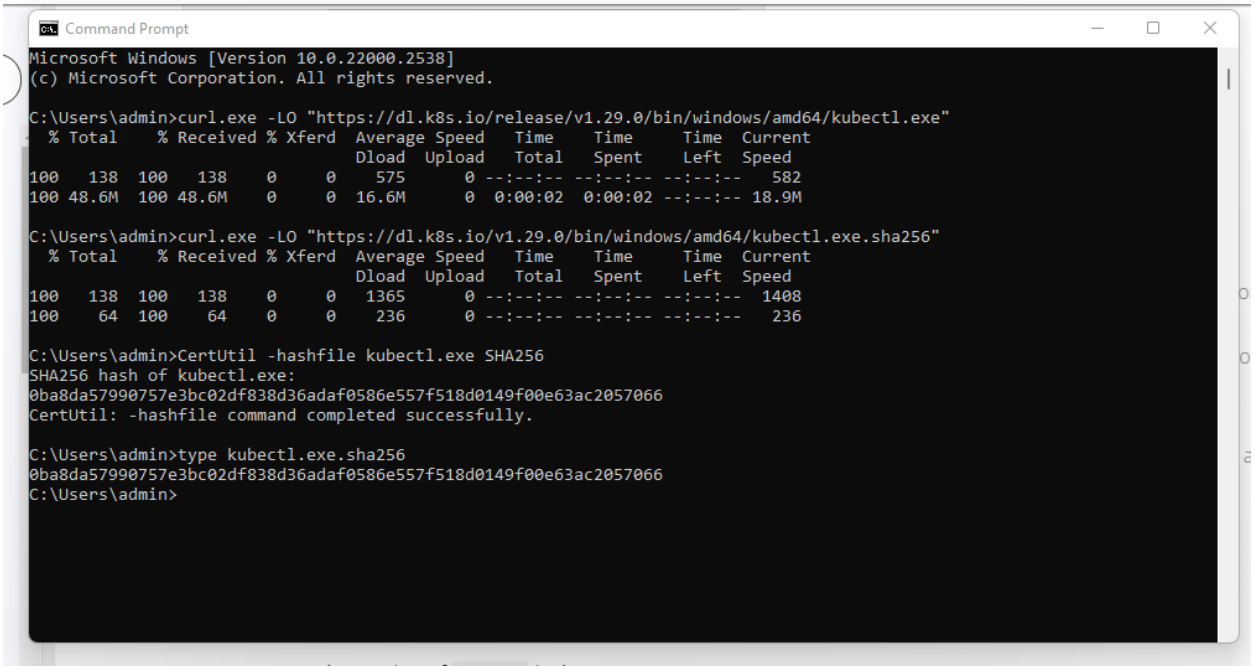

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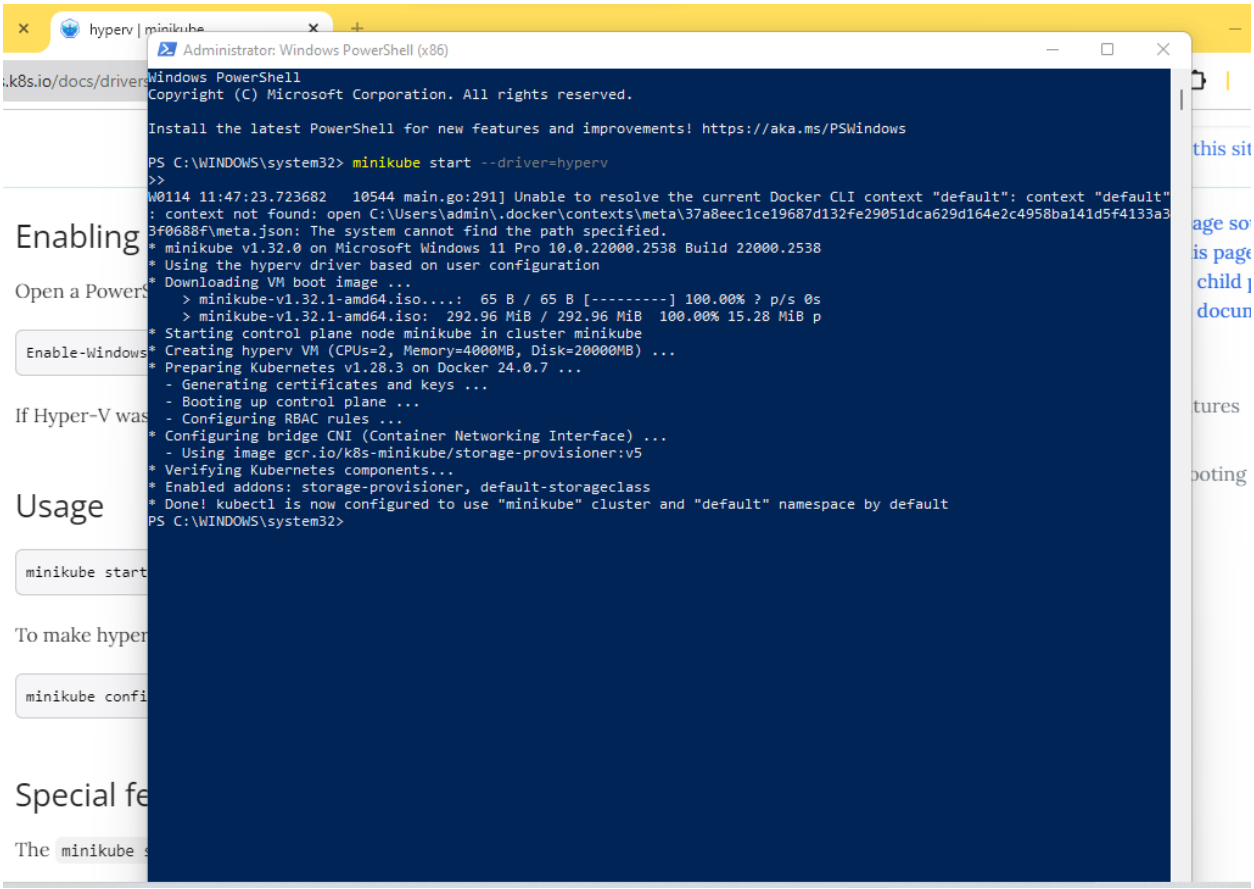

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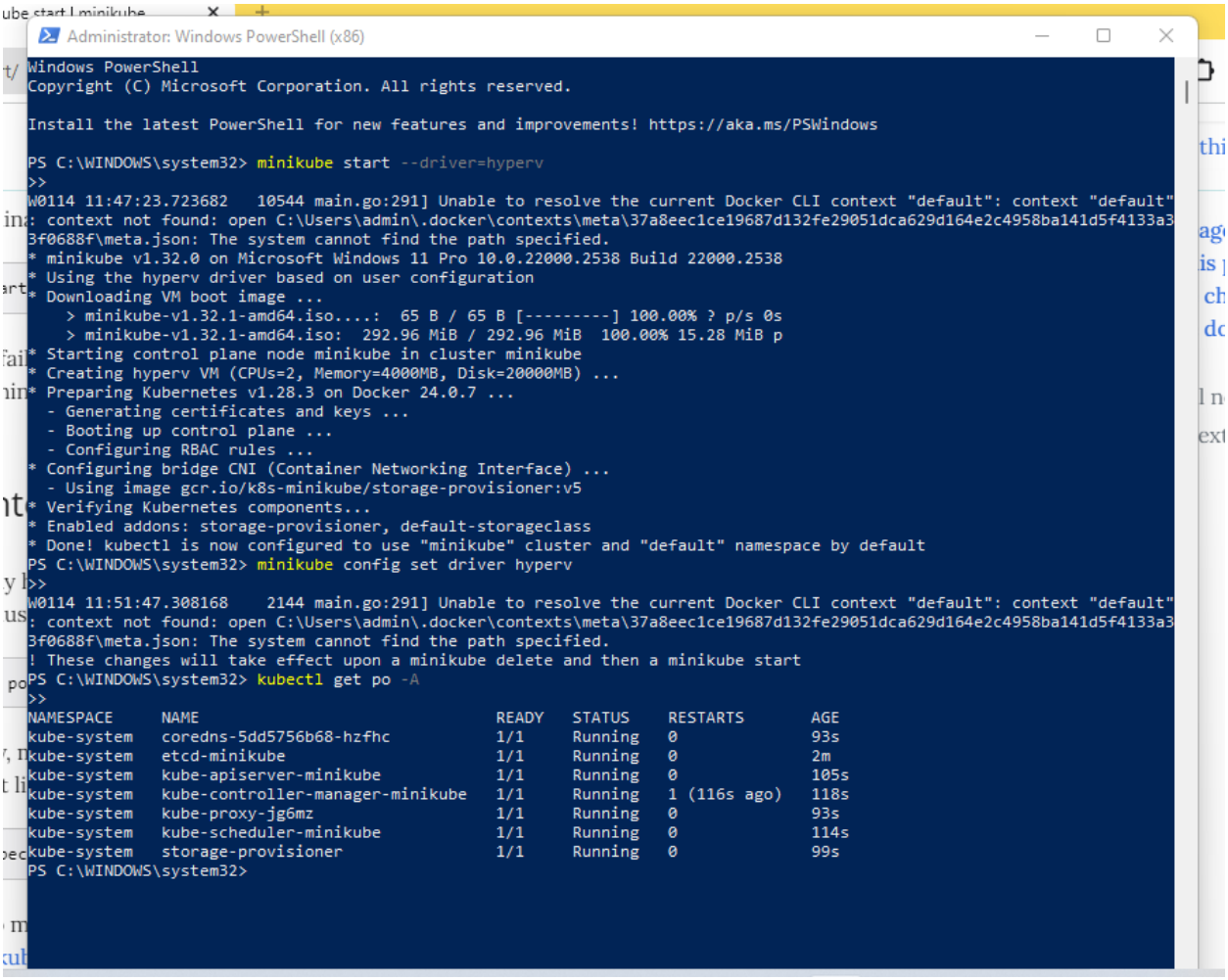

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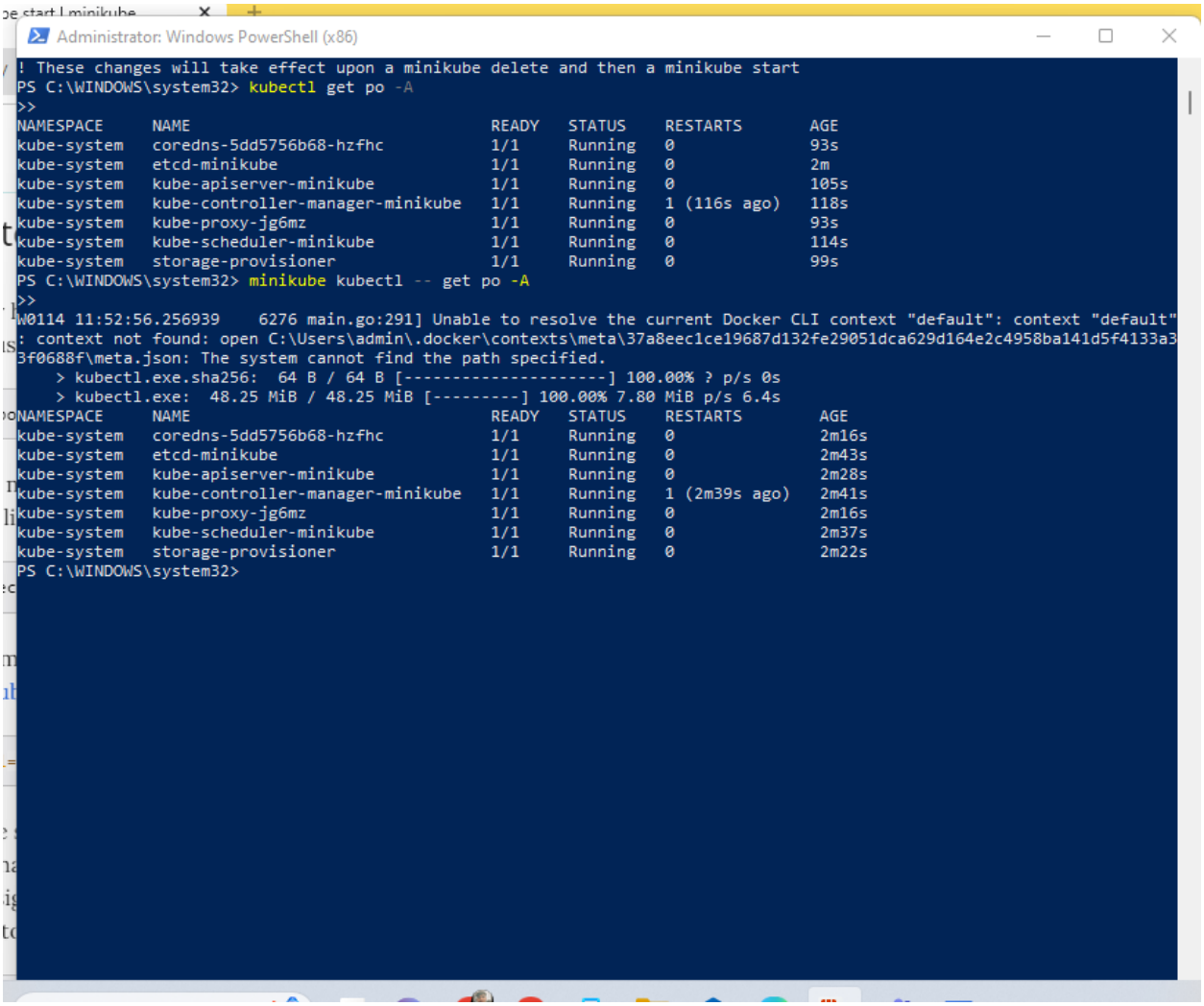

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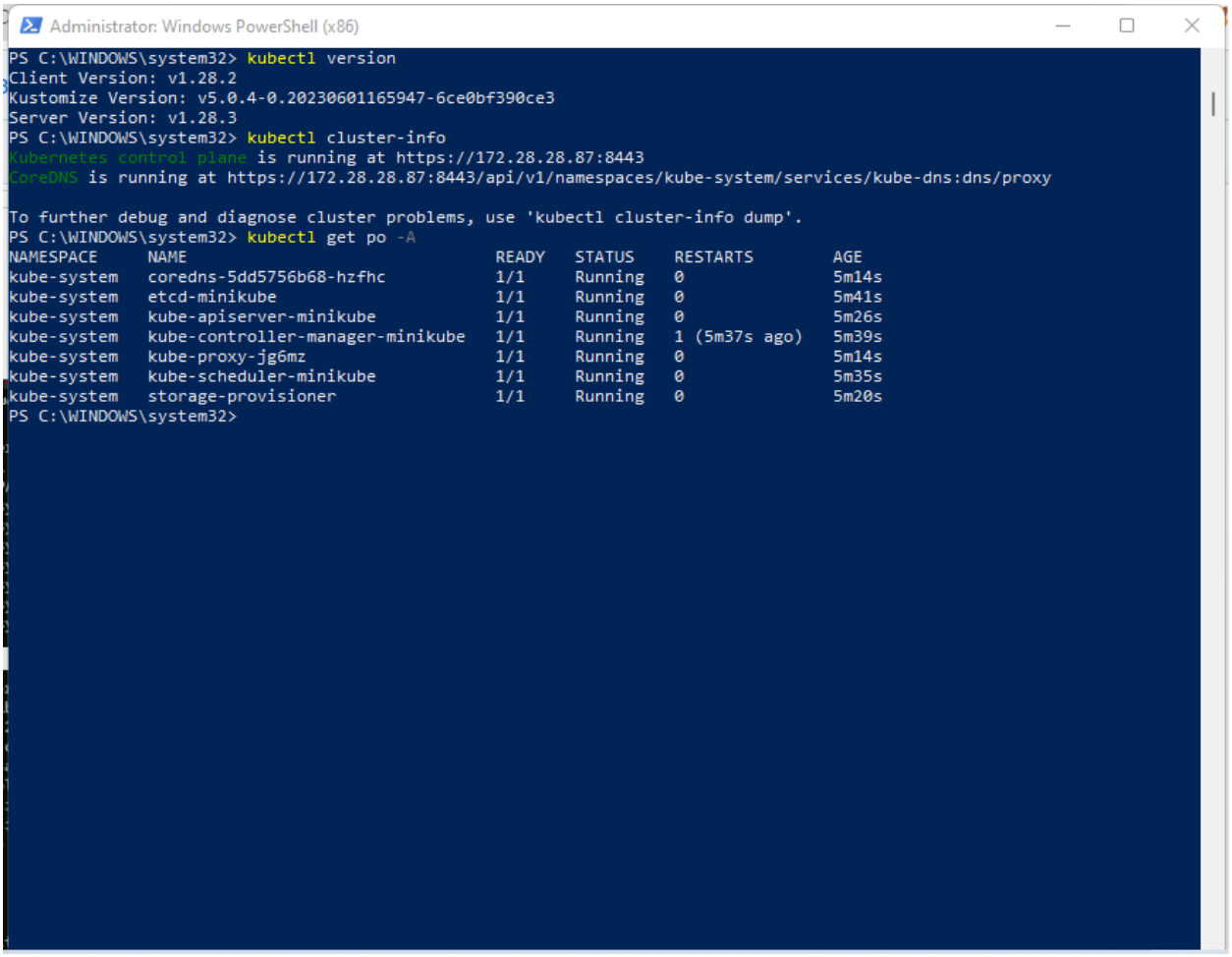

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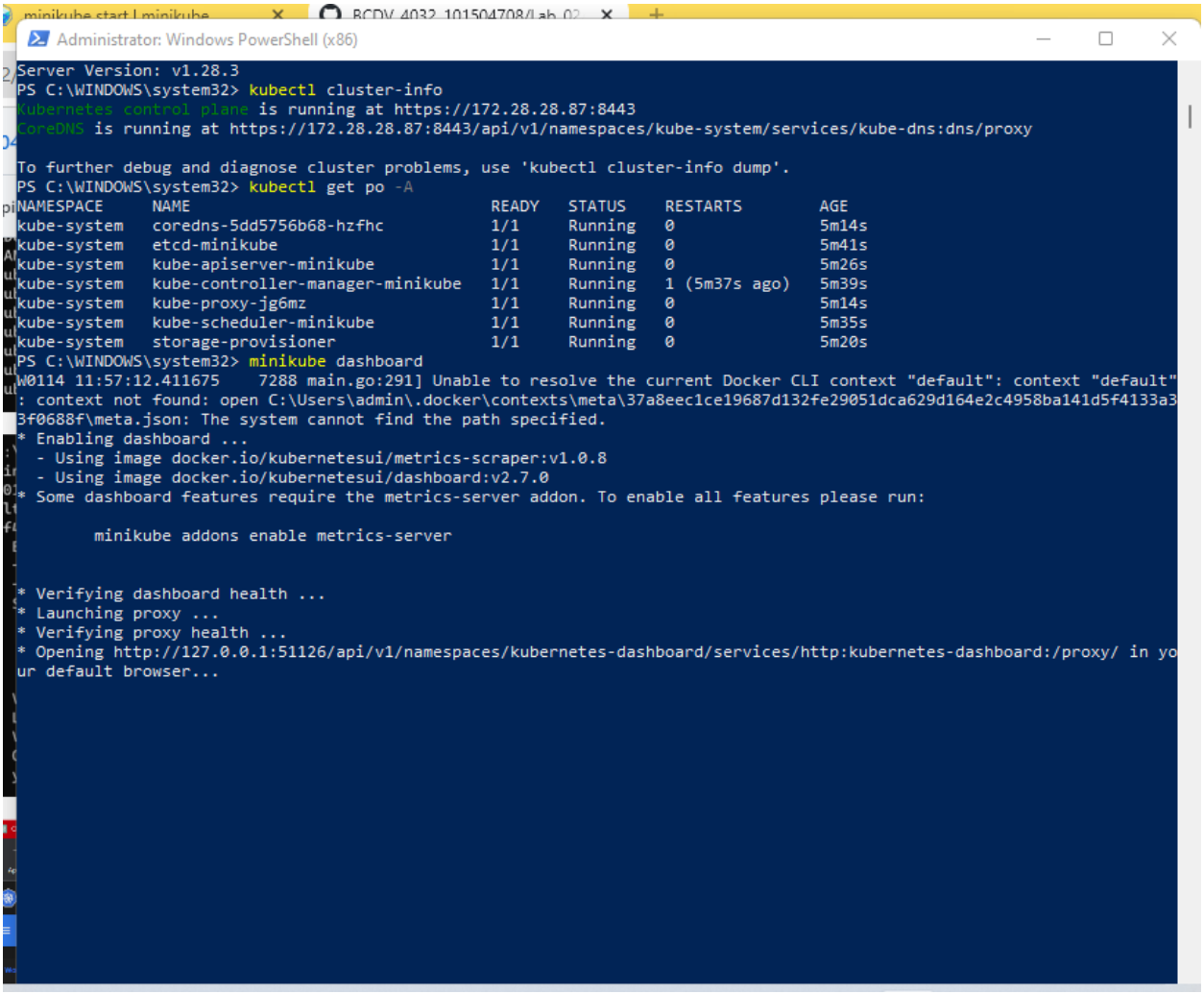

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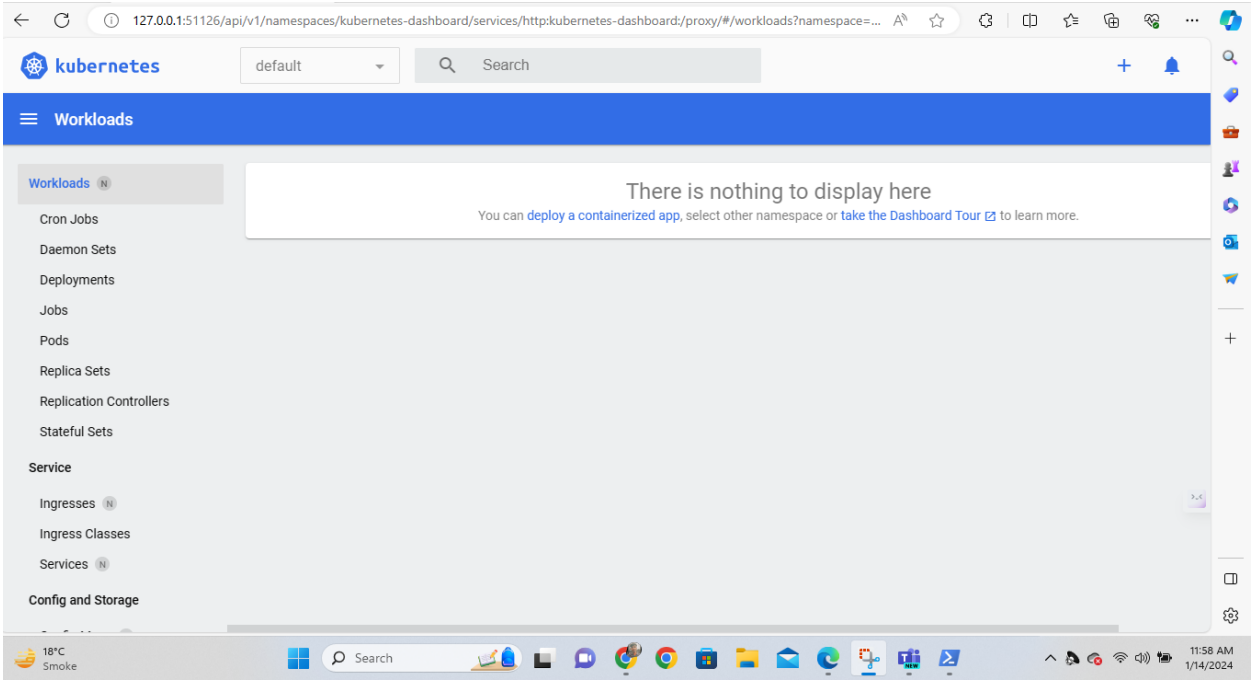

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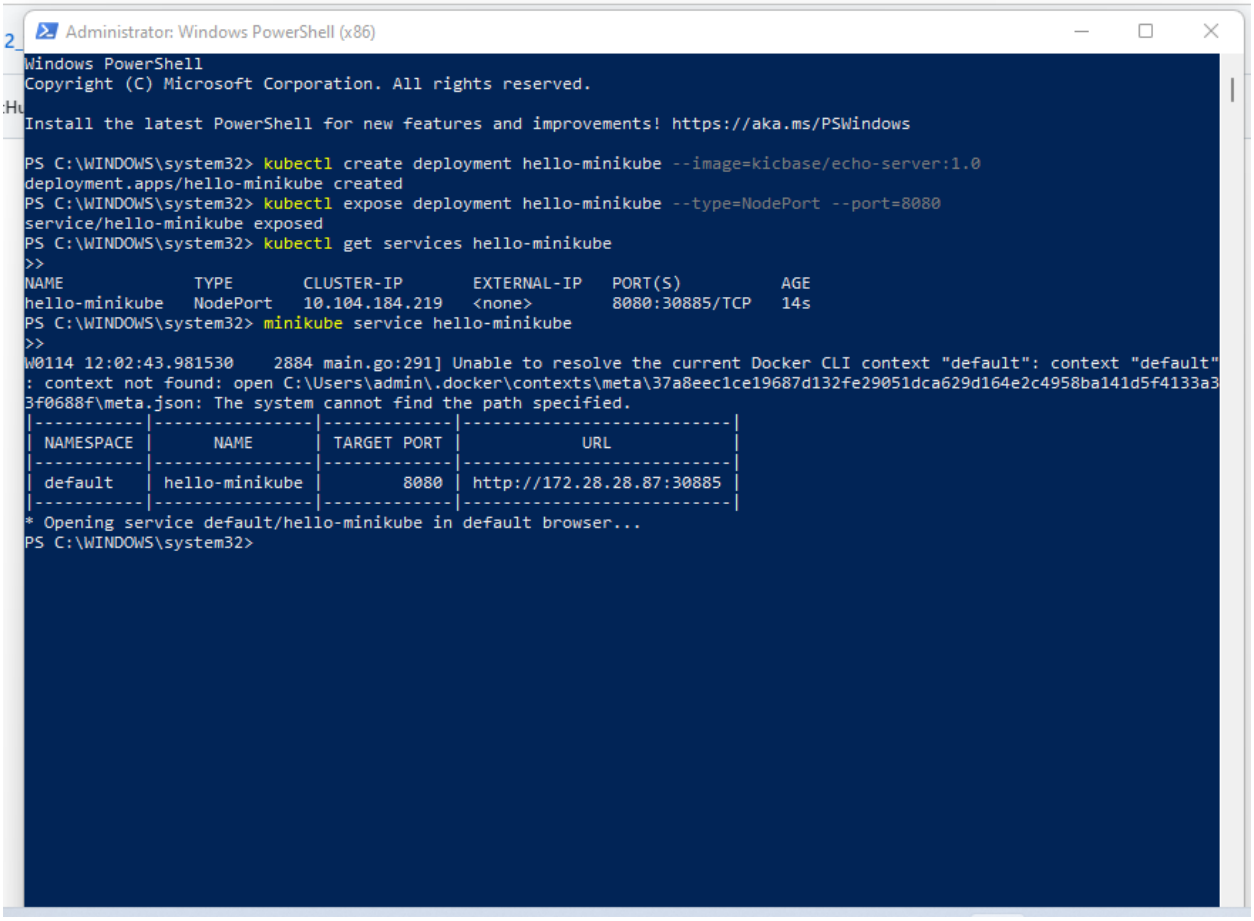

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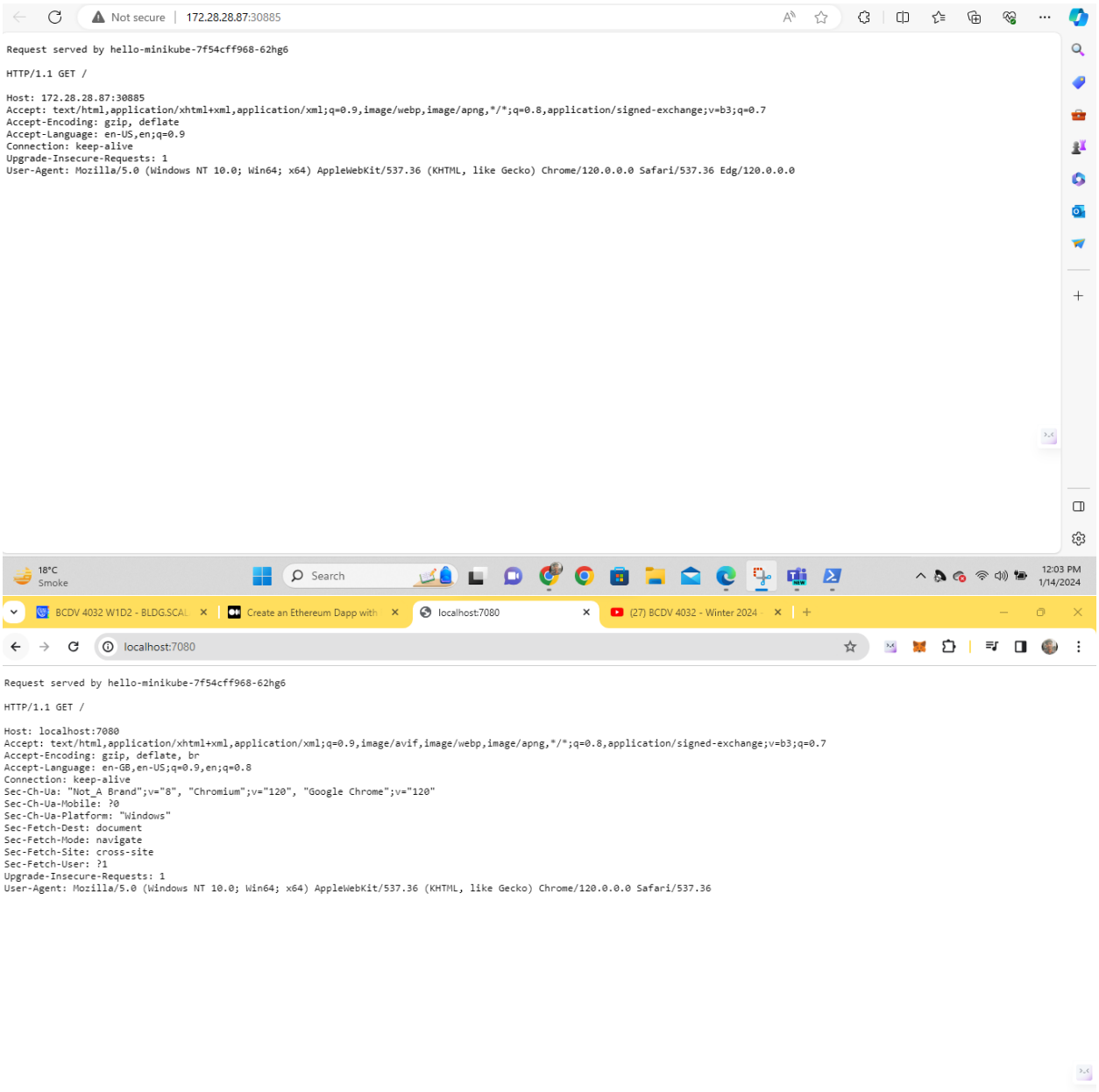

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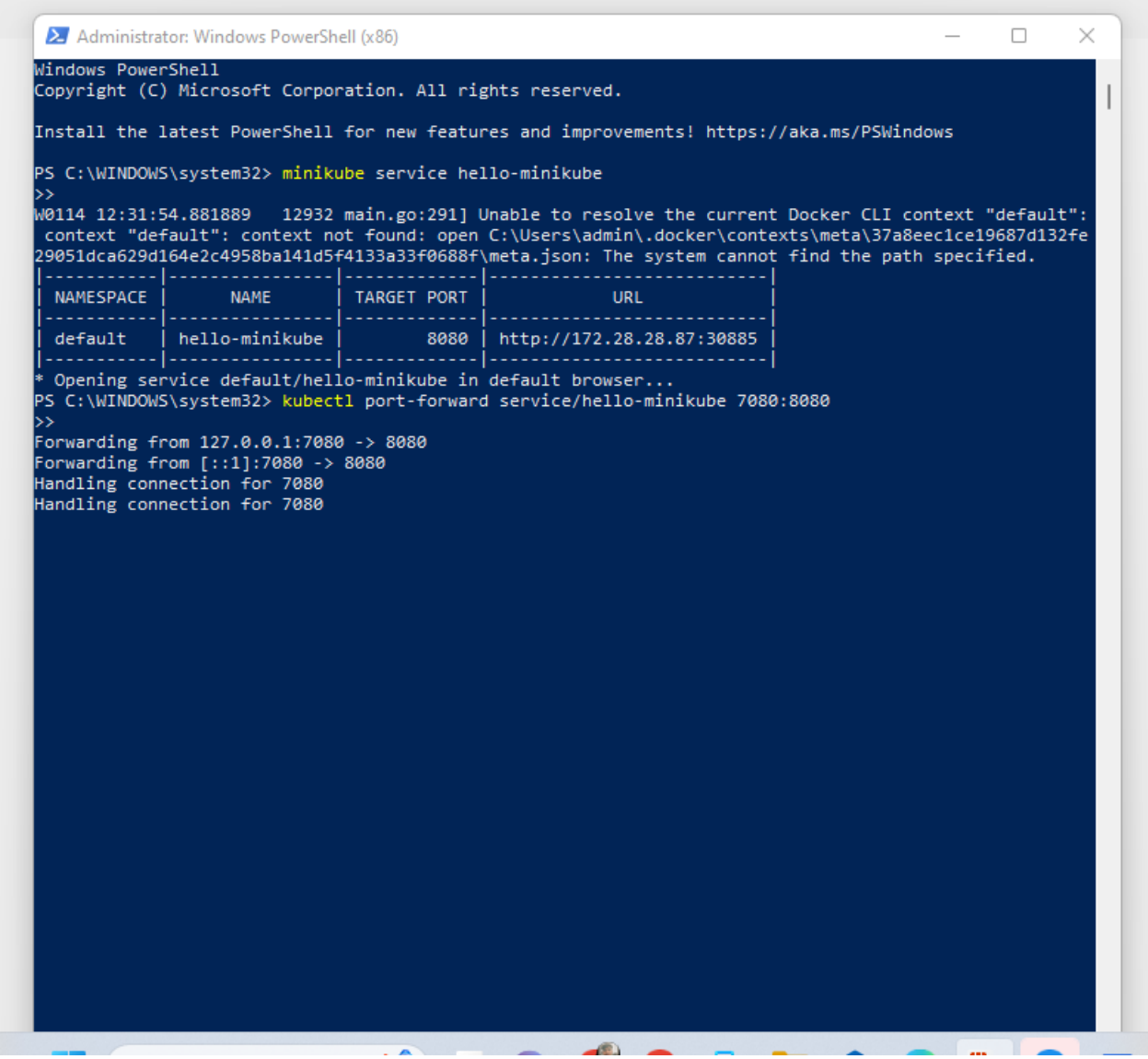

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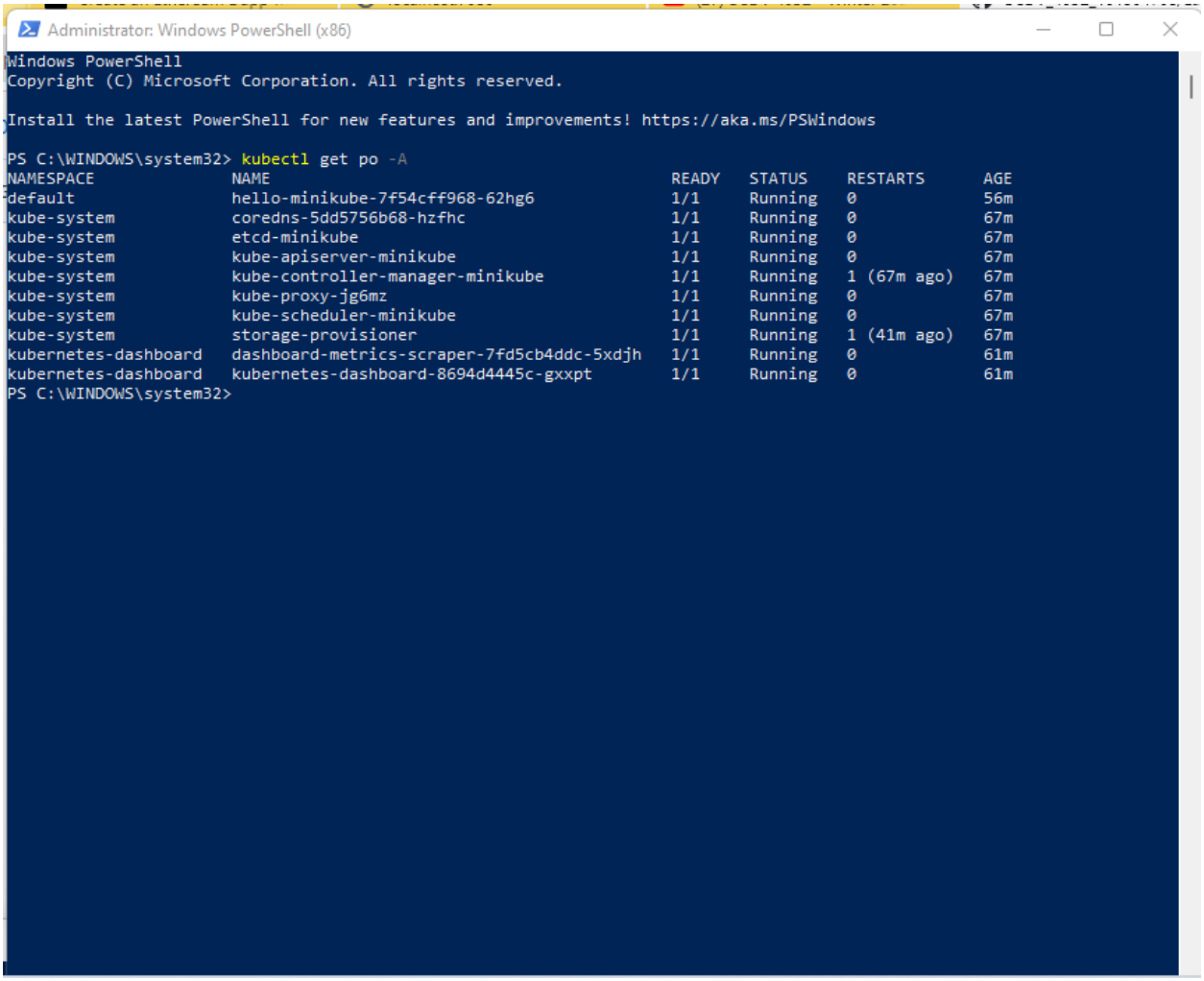

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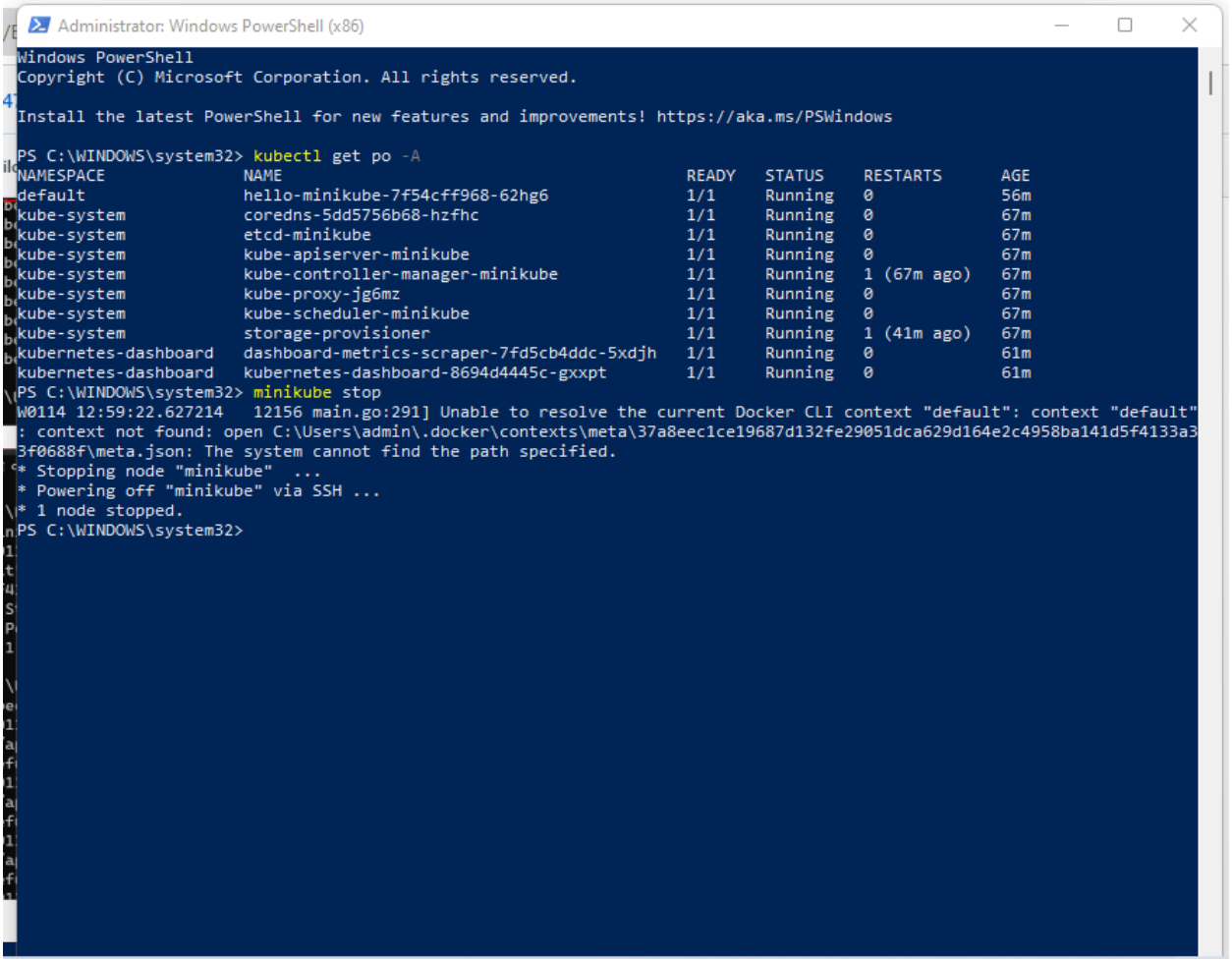

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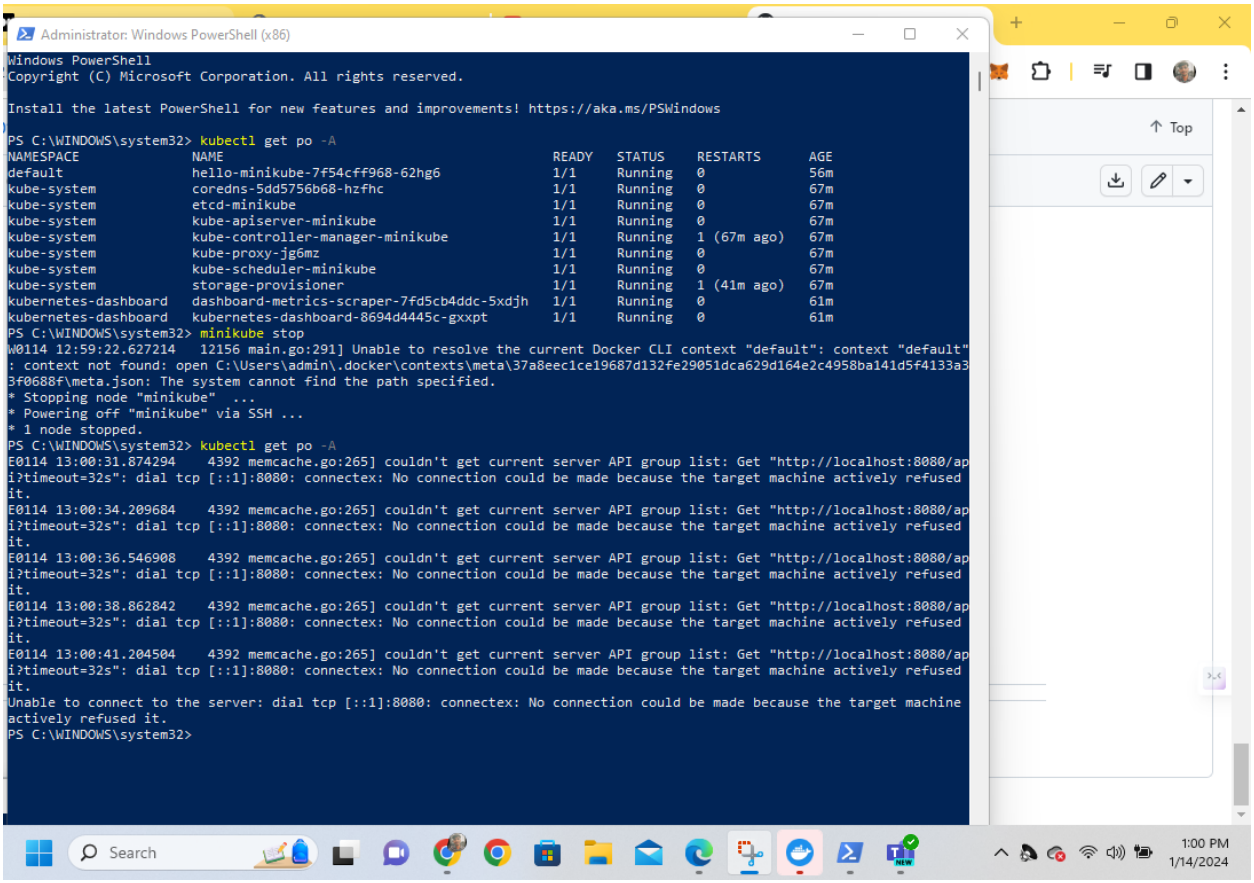

Section 3 – Quiz

Q 1 – Understand what Kubernetes doesn't do from here (https://kubernetes.io/docs/concepts/overview/) and explain in your own words. Do not copy and paste from the website.

Ans – Based on the Kubernetes documentation, here are 10 key points about what Kubernetes doesn't do:

1. **Not a Traditional OS:** Kubernetes is not an operating system; it works on top of an OS.
2. **No Hardware Layer Management:** It does not manage the hardware layer.
3. **Doesn't Limit Types of Applications:** Kubernetes doesn't restrict the types of applications it supports.
4. **No Data Processing Workloads:** It doesn't deploy source code or handle data processing workloads directly.
5. **No Application-Level Services:** Kubernetes does not offer application-level services like middleware, databases, or cluster storage.
6. **Doesn't Dictate Logging/Monitoring Solutions:** It does not offer logging or monitoring solutions but can integrate with them.
7. **No Prescribing Deployment Methods:** Kubernetes does not prescribe deployment methods for applications.
8. **No CI/CD Workflow Management:** It does not manage continuous integration and deployment (CI/CD) workflows.
9. **Doesn't Provide Machine Configuration:** Kubernetes doesn't configure machines.

10.**No Limitation on Programming Languages:** It doesn't limit the programming languages or frameworks you can use.

Q 2 – What other Orchestration tools are available other than Kubernetes?

Ans – Other orchestration tools available in addition to Kubernetes include:

1. Docker Swarm
2. Apache Mesos
3. OpenShift
4. Nomad
5. Rancher