Task 5: Kubernetes

Additional information (RU):

1. Register in udemy.com if you don't have an account
2. Follow the link and add k8s course (it will be free for you) https://www.udemy.com/course/kubernetes-foundations/?couponCode=8618917066E01CCC5415
3. Study all the materials in this course.

Additional information (ENG):

1. Follow the link https://www.youtube.com/watch?v=X48VuDVv0do
2. Watch the video, have fun :)

Tasks:

1. Deploy kubernetes cluster. (Note: There are many ways to deploy a kubernetes cluster or its emulation. The deployment itself may be more complex than the rest of this task). You can use any method you want, we'll just list some of them from simple to complex.
    - minikube
    - kind
    - kubespray
    - eksctl
    - terraform eks
    - AWS/GKE manually
    - “bare metal” manually

2. Get a list of nodes, pods, deployments, services, namespaces of your cluster.

3. Use your docker compose from Task 3 - docker. (item 3.1.). Develop kubernetes manifests to deploy the same applications and their settings but in kubernetes.
How can we make sure the application works and responds as expected?
Extra 3.1. Use kubernetes secret/config maps for secrets and settings

4. Deploy nginx using a third party helm chart. How can we see the "hello world" web page in the browser?
Extra 4.1. Develop a helm chart to deploy the set of applications from step 3.