

Exercise 4.8: Domain Review



Very Important

The source pages and content in this review could change at any time. **IT IS YOUR RESPONSIBILITY TO CHECK THE CURRENT INFORMATION.**

Revisit the CKAD domain list on [Curriculum Overview](#) and locate some of the topics we have covered in this chapter. They may be in multiple sections. The items below shows the topics covered in this chapter.

- Understand Jobs and CronJobs
- Understanding and defining resources requirements, limits and quotas
- Understand multi-container Pod design patterns (e.g. sidecar **init**, and others)
- Discover and use resources that extend Kubernetes (CRD).

Focus on ensuing you have all the necessary files and processes understood first. Repeat the review until you are sure of the necessary YAML samples and can complete each step quickly, and ensure each object is running properly.

1. Find and use the `design-review1.yaml` file to create a pod.
2. Determine the CPU and memory resource requirements of `design-pod1`.
3. Edit the pod resource requirements such that the CPU limit is exactly twice the amount requested by the container. (Hint: subtract .22)
4. Increase the memory resource limit of the pod until the pod shows a `Running` status. This may require multiple edits and attempts. Determine the minimum amount necessary for the `Running` status to persist at least a minute.
5. Use the `design-review2.yaml` file to create several pods with various labels.
6. Using **only** the `-selector` value `tux` to delete only those pods. This should be half of the pods. Hint, you will need to view pod settings to determine the key value as well.
7. Create a new cronjob which runs `busybox` and the `sleep 30` command. Have the cronjob run every three minutes. View the job status to check your work. Change the settings so the pod runs 10 minutes from the current time, every week. For example, if the current time was 2:14PM, I would configure the job to run at 2:24PM, every Monday.
8. Delete any objects created during this review. You may want to delete all but the cronjob if you'd like to see if it runs in 10 minutes. Then delete that object as well.