Exercise 9.4: Use Labels to Manage Resources

1. Try to delete all Pods with the `system=secondary` label, in all namespaces.

   ```
   student@cp:~$ kubectl delete pods -l system=secondary \
           --all-namespaces
   ```

   ```
   1  pod "nginx-one-74dd9d578d-fcpmv" deleted
   2  pod "nginx-one-74dd9d578d-sts5l" deleted
   ```

2. View the Pods again. New versions of the Pods should be running as the controller responsible for them continues.

   ```
   student@cp:~$ kubectl -n accounting get pods
   ```

   ```
   1  NAME                         READY     STATUS     RESTARTS    AGE
   2  nginx-one-74dd9d578d-ddt5r   1/1       Running    0           1m
   3  nginx-one-74dd9d578d-hfzml   1/1       Running    0           1m
   ```

3. We also gave a label to the deployment. View the deployment in the accounting namespace.

   ```
   student@cp:~$ kubectl -n accounting get deploy --show-labels
   ```

   ```
   1  NAME        READY   UP-TO-DATE  AVAILABLE  AGE  LABELS
   2  nginx-one   2/2     2           2          10m  system=secondary
   ```

4. Delete the deployment using its label.

   ```
   student@cp:~$ kubectl -n accounting delete deploy -l system=secondary
   ```

   ```
   1  deployment.apps "nginx-one" deleted
   ```

5. Remove the label from the secondary node. Note that the syntax is a minus sign directly after the key you want to remove, or `system` in this case.

   ```
   student@cp:~$ kubectl label node worker system-
   ```

   ```
   1  node/worker labeled
   ```