Question 1

Creating a YAML file named nginx-deploy.yaml

```
touch nginx-deploy.yaml
```

Creating 3 replicas of nginx deployment

```
spec:
  replicas: 3
  selector:
```

Making container listen on port: 80

```
spec:
  containers:
  - name: nginx
    image: nginx:latest
    ports:
    - containerPort: 80
```

Setting deployment name as nginx-deploy

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: nginx-deploy
  labels:
    app: nginx
    role: webserver
```

Adding labels as **role: webserver** and **app: nginx**

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: nginx-deploy
  labels:
    app: nginx
    role: webserver
```

Apply the changes:

```
kubectl apply -f nginx-deploy.yaml
```

```
controlplane $ touch nginx-deploy.yml
controlplane $ vim nginx-deploy.yml
controlplane $ kubectl apply -f nginx-deploy.yml
deployment.apps/nginx-deploy created
controlplane $
```

After successful creating of the deployment verifying the labels using command:

```
kubectl get deployments --show-labels
```

```
Editor   Tab 1   +
controlplane $ kubectl get deployments --show-labels
NAME           READY   UP-TO-DATE   AVAILABLE   AGE    LABELS
nginx-deploy   3/3     3            3           110s   app=nginx,role=webserver
controlplane $
```