Helm charts Reference

References:
https://docs.bitnami.com/tutorials/create-your-first-helm-chart/

How to create helm chart?
helm create <Chart-name>
eg: helm create kube-charts => This create a chart folder call kubep-charts

Navigate to template/deployment.yaml file and make below changes

- containerport :8080

Navigate to values.yaml file and make below changes

- Update image:

```
repository: nagarajujavvaji/k8s-java
pullPolicy: IfNotPresent
# Overrides the image tag whose default is the chart appVersion.
tag: 1.0.0
```

- Update the service as follows

```
service:
  type: NodePort
  port: 8080
  targetPort: 8080
  portname: http-k8s
```

- Update ingress to add route

```
ingress:
  http:
    - match:
      - uri:
          prefix: /
```

Save all the charts and Dry run the charts with below helm command

- helm template dryrun --debug ./kube-charts

Install the charts with the below helm command

- helm install <Some Name> <Charts folder>
- Example: helm install k8s-dev ./kube-charts
- You will see the instructions to follow

```
nagarajujavvaji@MacBook-Pro k8s-java % helm install k8s-dev ./kube-charts
NAME: k8s-dev
LAST DEPLOYED: Sat Jul 11 23:44:07 2020
NAMESPACE: default
STATUS: deployed
REVISION: 1
NOTES:
1. Get the application URL by running these commands:
  export NODE_PORT=$(kubectl get --namespace default -o jsonpath="{.spec.ports[0].nodePort}" services k8s-dev-kube-charts)
  export NODE_IP=$(kubectl get nodes --namespace default -o jsonpath="{.items[0].status.addresses[0].address}")
  echo http://$NODE_IP:$NODE_PORT
```

- You can also find the services with: minikube service list

```
nagarajujavvaji@MacBook-Pro k8s-java % minikube service list
|-------------|----------------------|--------------|-----------------------------|
|  NAMESPACE  |        NAME          | TARGET PORT  |             URL             |
|-------------|----------------------|--------------|-----------------------------|
| default     | ajcloud-mychart      | http/8080    | http://192.168.99.100:32503 |
| default     | k8s-dev-kube-charts  | http/8080    | http://192.168.99.100:31576 |
| default     | kubernetes           | No node port |
| kube-system | kube-dns             | No node port |
|-------------|----------------------|--------------|-----------------------------|
```

- helm list -> It display chats
- helm delete <chart name> => delete charts
- Minikube delete service <service name> -> delete service