

<https://github.com/DennisPYu/SIT323-2024-t1prac6.1p>

Deployment.yaml file that deploy app on kubernetes

```
deployment.yaml > {} spec > {} template > {} spec > [ ] containers > {} 0 > [ ] ports > {} 0
1  apiVersion: apps/v1
2  kind: Deployment
3  metadata:
4    name: calculator-app-deployment
5  spec:
6    replicas: 2
7    selector:
8      matchLabels:
9        app: nodejs-app
10   template:
11     metadata:
12       labels:
13         app: nodejs-app
14     spec:
15       containers:
16       - name: nodejs-app
17         image: dennisyup/calculator-app:latest
18         ports:
19         - containerPort: 4000
20
```

Command that created the deployment

```
PS I:\Study\BachelorD\2024T1\SIT323-Cloud Native Application Development\6.1p\docker_calculator-upgrade> kubectl apply -f deployment.yaml
deployment.apps/calculator-app-deployment created
```

Expose app to the outside

```
service.yaml > {} metadata > name
1  apiVersion: v1
2  kind: Service
3  metadata:
4    name: calculator-app-service
5  spec:
6    type: LoadBalancer
7    ports:
8    - port: 4000
9      targetPort: 4000
10   selector:
11     app: nodejs-app
12
```

Command that apply the services to Kubernetes cluster

```
PS I:\Study\BachelorD\2024T1\SIT323-Cloud Native Application Development\6.1p\docker_calculator-upgrade> kubectl apply -f service.yaml
service/calculator-app-service created
```

Docker image

