

## Task: 1 install Istio

```
istio analyze
```

```
Install istio
```

```
curl -L https://istio.io/downloadIstio | sh -
```

```
mv istio-1.18.1/bin/istioctl /bin
```

```
istioctl install --set profile=demo -y
```

	default	demo	minimal	remote	empty	preview
Core components						
istio-egressgateway		✓				
istio-ingressgateway		✓		✓		✓
istiod			✓		✓	
✓		✓				

```
kubectl label namespace default istio-injection=enabled
```

```
cd istio-1.18.1/
```

```
kubectl create -f samples/addons/kiali.yaml
```

```
kubectl create -f samples/addons/prometheus.yaml
```

( make these apps service to nodeport service so that we can access them from browser )

```
kubectl get all --all-namespaces
```

```
kubectl -n istio-system get services
```

```
kubectl -n istio-system edit svc kiali
```

```
make it NodePort
```

```
kubectl get pods
```

```
istioctl analyze
```

Task 2: install bookinfo application and check no istio containers in it's pods  
this application is example of canary deployment.

```
kubectl get namespaces --show-labels
```

```
kubectl create namespace noistio
```

```
kubectl apply --namespace=noistio -f samples/bookinfo/platform/kube/bookinfo.yaml
```

```
kubectl get pods --namespace=noistio
```

```
kubectl get all --namespace=noistio
```

Now goto the kiali dashboard and check your bookinfo application it will  
show you sidecar missing..

```
kubectl delete namespace noistio
```

## Task 3: enable istio on namespace and deploy bookinfo application

```
kubectl create namespace withistio
```

Enable istio in newly created namespace.

```
kubectl label namespace withistio istio-injection=enabled
```

```
kubectl apply --namespace=withistio -f samples/bookinfo/platform/kube/bookinfo.yaml
```

```
kubectl get pods --namespace=withistio
```

```
kubectl get all --namespace=withistio
```

```
kubectl get services --namespace=withistio
```

Change product service to nodeport and access it from browser

```
kubectl --namespace=withistio edit svc productpage
```

access product page using nodePort

```
kubectl --namespace=withistio get svc
```

than check kiali dashboard it will not show missing side-Car

```
kubectl get all --all-namespaces
```

Task: 4 install jaeger-operator Request Tracing tool

```
kubectl apply -f https://raw.githubusercontent.com/istio/istio/release-1.17/samples/addons/jaeger.yaml
```

make accessible Jaeger

```
kubectl edit svc tracing -n istio-system
```

change type to NodePort

```
kubectl get svc -n istio-system
```

change tracing service to nodeport and access bookinfo application  
now see traces...