Configure let's encrypt SSL in kubernetes ingress

Steps:

1. Execute "**kubectl apply -f** https://github.com/jetstack/cert-manager/releases/download/v1.11.0/cert-manager.crds.yaml"
2. Execute "**helm repo add jetstack** https://charts.jetstack.io"
3. Execute "**helm repo update**"
4. Execute "**helm install cert-manager jetstack/cert-manager --namespace cert-manager --create-namespace --version v1.11.0** "
5. Write a .yml file to create ClusterIssuer

   ClusterIssuer.yml

```yaml
apiVersion: cert-manager.io/v1
kind: ClusterIssuer
metadata:
  name: letsencrypt-prod
spec:
  acme:
    server: https://acme-v02.api.letsencrypt.org/directory
    email: atul.aman@remotestate.com
    privateKeySecretRef:
      name: letsencrypt-prod
    solvers:
    - http01:
        ingress:
          class: nginx
```

6. Execute "**kubectl apply -f ClusterIssuer.yml**"
7. Write a .yml file to create Certificate and Secrets

   Certificate.yml

```yaml
apiVersion: cert-manager.io/v1
kind: Certificate
metadata:
  name: example-certificate
  namespace: default
spec:
  secretName: example-tls
  issuerRef:
    name: letsencrypt-prod
    kind: ClusterIssuer
  commonName: mikku.atulaman.site
  dnsNames:
  - mikku.atulaman.site
```

8. Execute "**kubectl apply -f Certificate.yml**"

9. Write a .yml file to create ingress

Ingress.yml

```yaml
apiVersion: networking.k8s.io/v1
kind: Ingress
metadata:
 name: myapp-ingress
 namespace: default
 annotations:
    nginx.ingress.kubernetes.io/rewrite-target: /
    cert-manager.io/cluster-issuer: "letsencrypt-production"
    nginx.ingress.kubernetes.io/ssl-redirect: "true"
spec:
 tls:
 - hosts:
   - "mikku.atulaman.site"
   secretName: example-tls
 ingressClassName: nginx
 rules:
 - host: "mikku.atulaman.site"
   http:
     paths:
     - path: /
       pathType: Prefix
       backend:
         service:
           name: myapp-service
           port:
             number: 80
```

10. Execute "**kubectl apply -f Ingress.yml**"