

kubernetes

```
controlplane $ kubectl create deployment wordpress --image=docker.io/wordpress --dry-run=client -o yaml > wp.yaml
controlplane $ kubectl create deployment mysql --image=docker.io/mysql:5.6 --dry-run=client -o yaml > mysql.yaml
controlplane $
```

creating deployment for the mysql and wordpress

```
controlplane $ vi mysql.yaml
controlplane $ kubectl apply -f mysql.yaml
deployment.apps/mysql created
controlplane $
```

creating and applying the yaml file of the mysql

```
controlplane $ kubectl apply -f wp.yaml
deployment.apps/wordpress created
controlplane $
```

creaing and applying the yaml file of the wordpress

```
Exam Desktop Editor Tab 1
controlplane $ cat mysql.yml
apiVersion: apps/v1
kind: Deployment
metadata:
  creationTimestamp: null
  labels:
    app: mysql
  name: mysql
spec:
  replicas: 1
  selector:
    matchLabels:
      app: mysql
  strategy: {}
  template:
    metadata:
      creationTimestamp: null
      labels:
        app: mysql
    spec:
      containers:
      - image: docker.io/mysql:5.6
        name: mysql
        env:
          - name: MYSQL_ROOT_PASSWORD
            value: pawan
          - name: MYSQL_DATABASE
            value: cka
        resources: {}
status: {}
controlplane $
```

yaml file of the mysql

```
controlplane $ cat wp.yml
apiVersion: apps/v1
kind: Deployment
metadata:
  creationTimestamp: null
  labels:
    app: wordpress
  name: wordpress
spec:
  replicas: 1
  selector:
    matchLabels:
      app: wordpress
  strategy: {}
  template:
    metadata:
      creationTimestamp: null
      labels:
        app: wordpress
    spec:
      containers:
      - image: docker.io/wordpress
        name: wordpress
        env:
          - name: WORDPRESS_DB_HOST
            value: mysql
          - name: WORDPRESS_DB_NAME
            value: cka
          - name: WORDPRESS_DB_PASSWORD
            value: pawan
          - name: WORDPRESS_DB_USER
            value: root
      resources: {}
  status: {}
controlplane $
```

yaml file of the wordpress

```
controlplane $ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
mysql-79d768fbff-6kqq8             1/1     Running   0           29m
wordpress-598587dd49-ksf8z         1/1     Running   0           28m
controlplane $ kubectl get pods -o wide
NAME                                READY   STATUS    RESTARTS   AGE   IP            NODE     NOMINATED NODE   READINESS GATES
mysql-79d768fbff-6kqq8             1/1     Running   0           29m   192.168.1.4   node01   <none>            <none>
wordpress-598587dd49-ksf8z         1/1     Running   0           28m   192.168.1.5   node01   <none>            <none>
controlplane $
```

fetching the details of pods using the command

kubectl get pods

```
controlplane $ kubectl expose deployment mysql --port=3306
service/mysql exposed
controlplane $ kubectl expose deployment wordpress --port=80 --type=NodePort
service/wordpress exposed
controlplane $
```

creating the service and give the port number to mysql
and wordpress

```
controlplane $ kubectl get svc
```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
kubernetes	ClusterIP	10.96.0.1	<none>	443/TCP	22d
mysql	ClusterIP	10.102.175.175	<none>	3306/TCP	93s
wordpress	NodePort	10.108.211.110	<none>	80:30129/TCP	57s

```
controlplane $
```

fetch the service of wordpress and mysql

```
controlplane $ kubectl get deployments
```

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
mysql	1/1	1	1	28m
wordpress	1/1	1	1	27m

```
controlplane $
```

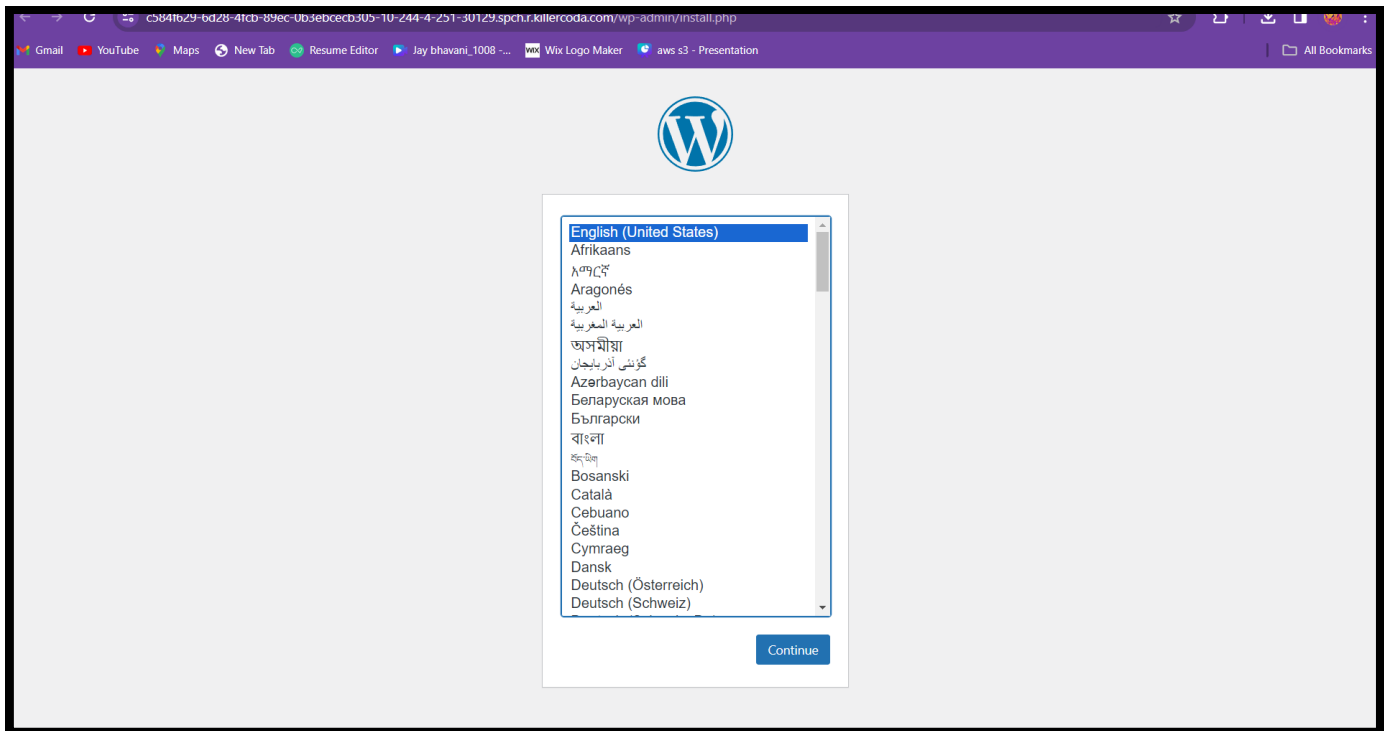
fetch the deployments

```
controlplane $ kubectl describe svc mysql
Name:                mysql
Namespace:           default
Labels:              app=mysql
Annotations:         <none>
Selector:            app=mysql
Type:                ClusterIP
IP Family Policy:    SingleStack
IP Families:         IPv4
IP:                  10.102.175.175
IPs:                 10.102.175.175
Port:                <unset> 3306/TCP
TargetPort:          3306/TCP
Endpoints:           192.168.1.4:3306
Session Affinity:    None
Events:              <none>
controlplane $
```

describing the service mysql

```
controlplane $ kubectl describe svc wordpress
Name:                wordpress
Namespace:           default
Labels:              app=wordpress
Annotations:         <none>
Selector:            app=wordpress
Type:                NodePort
IP Family Policy:    SingleStack
IP Families:         IPv4
IP:                  10.108.211.110
IPs:                 10.108.211.110
Port:                <unset> 80/TCP
TargetPort:          80/TCP
NodePort:            <unset> 30129/TCP
Endpoints:           192.168.1.5:80
Session Affinity:    None
External Traffic Policy: Cluster
Events:              <none>
controlplane $
```

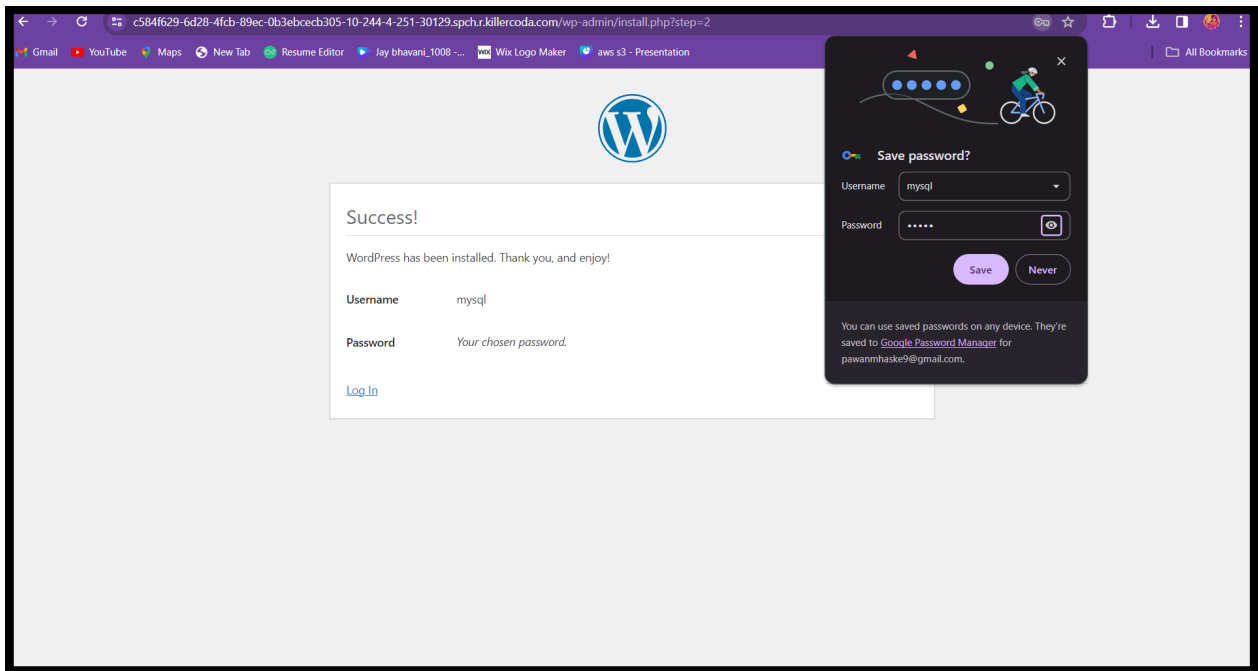
describing the service wordpress



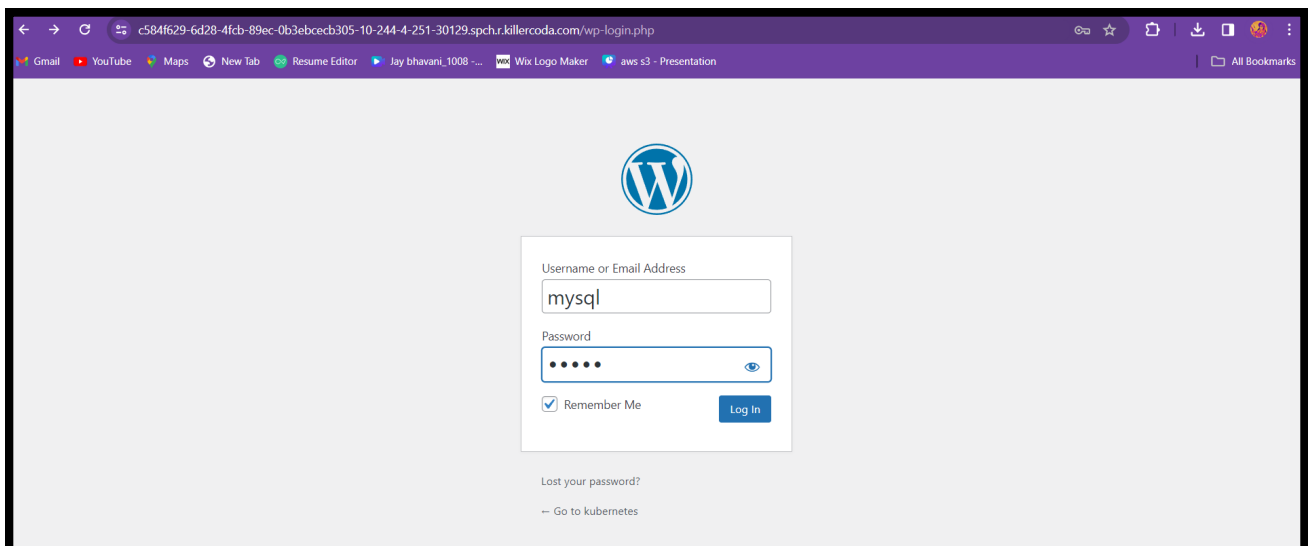
after entering the correct port number i.e NodePort
described in the service

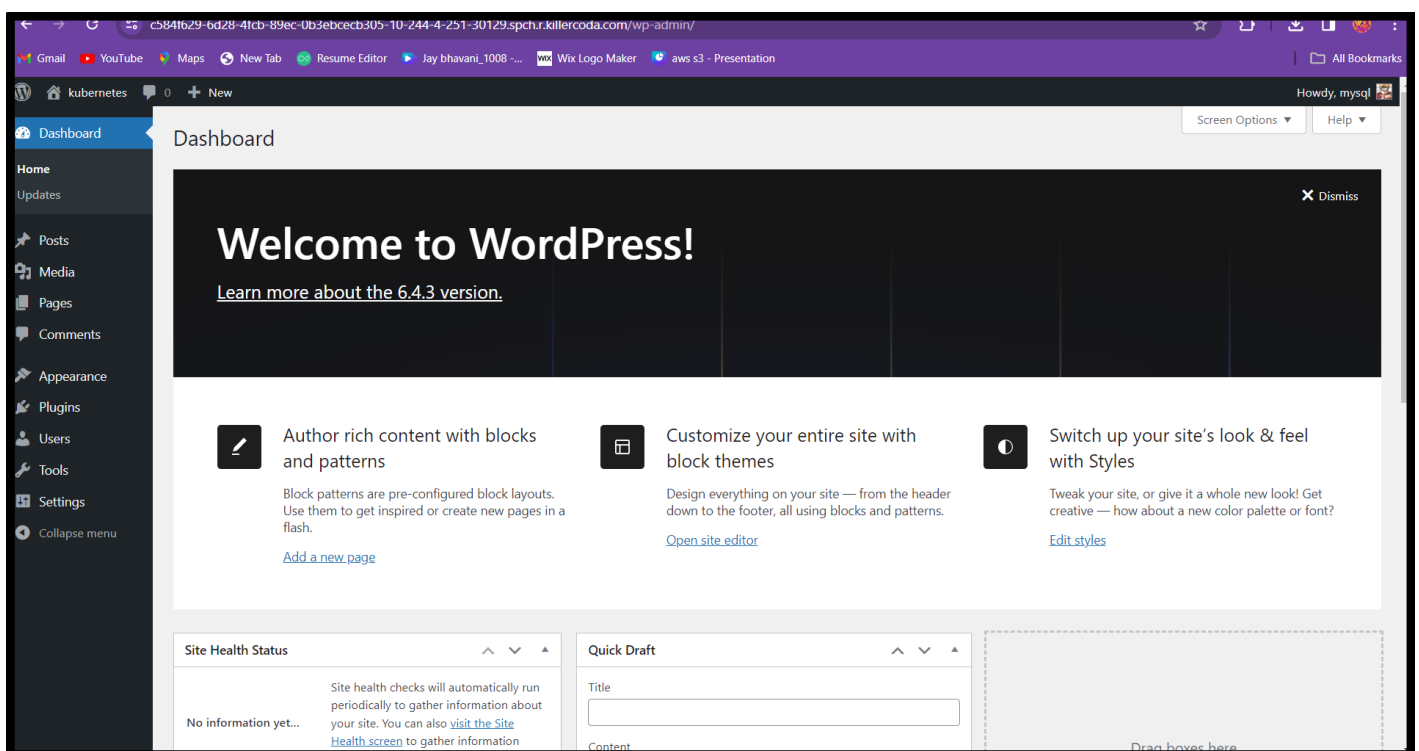
A screenshot of the WordPress installation 'Welcome' screen. The page has a light gray background with a white central content area. At the top, it says 'Welcome' and provides a brief introduction. Below this is a section titled 'Information needed' with a note: 'Please provide the following information. Do not worry, you can always change these settings later.' The form contains several fields: 'Site Title' with the value 'kubernetes', 'Username' with the value 'mysql', 'Password' with the value 'pawan' (which is highlighted as 'Very weak' with a red background), 'Confirm Password' with a checked box for 'Confirm use of weak password', and 'Your Email' with the value 'pawanmhaske9@gmail.com'. There is also a checkbox for 'Search engine visibility' which is unchecked. At the bottom left of the form is an 'Install WordPress' button.

enter the correct credentials



Entering the correct login credentials





welcome page of wordpress