# Module-9: Kubernetes Assignment - 2

You have been asked to:
- Use the previous deployment
- Create a service of type NodePort for nginx deployment
- Check the nodeport service on a browser to verify

Solution:

1) **Create the NodePort Service YAML File**:
   a) Create a file named nginx-service.yml with the following content:

   ```
   apiVersion: v1
   kind: Service
   metadata:
     name: nginx-service
     labels:
       app: nginx
   spec:
     type: NodePort
     selector:
       app: nginx
     ports:
     - port: 80
       targetPort: 80
       nodePort: 30000 # You can choose a different port within the range 30000-32767



   ~
   ~
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   ~
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   ~
   -- INSERT --
   ```

   **i-02bdb761a108eaf72 (k8-master)**

   PublicIPs: 43.205.203.129   PrivateIPs: 172.31.37.166

2) Use the kubectl command to apply the service file to your Kubernetes cluster:

   kubectl apply -f nginx-service.yml

   ```
   ubuntu@ip-172-31-37-166:~$ sudo vi nginx-service.yml
   ubuntu@ip-172-31-37-166:~$ kubectl apply -f nginx-service.yml
   service/nginx-service created
   ubuntu@ip-172-31-37-166:~$
   ```

   **i-02bdb761a108eaf72 (k8-master)**

   PublicIPs: 43.205.203.129   PrivateIPs: 172.31.37.166

3) Check the nodeport service on a browser to verify:

   kubectl get services

   ```
   ubuntu@ip-172-31-37-166:~$ kubectl get services
   NAME            TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)        AGE
   kubernetes      ClusterIP   10.96.0.1       <none>        443/TCP        40m
   nginx-service   NodePort    10.111.109.185  <none>        80:30000/TCP   49s
   ubuntu@ip-172-31-37-166:~$
   ```

   **i-02bdb761a108eaf72 (k8-master)**

   PublicIPs: 43.205.203.129   PrivateIPs: 172.31.37.166

4) Access the Service:

In your web browser, navigate to the public IP address of any of your Kubernetes nodes and the NodePort you specified:
http://<node-ip>:30000