

2. Deploy Postgres Client in cluster(psql)

To deploy postgres-client we need postgres image

Using psql -h, we can connect to the postgres database pod we have created earlier.

Simply creating a postgres YAML with user and database in client directory

vi postgres.yaml

```
bibek@bibek-LfTech:~/assignment/mongo/client$ ls
postgres.yaml
bibek@bibek-LfTech:~/assignment/mongo/client$ pwd
/home/bibek/assignment/mongo/client
bibek@bibek-LfTech:~/assignment/mongo/client$
```

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: postgres-client-deployment
  labels:
    app: client
spec:
  selector:
    matchLabels:
      app: client
  replicas: 1
  template:
    metadata:
      name: postgres-client-deployment
      labels:
        app: client
    spec:
      containers:
        - env:
            - name: POSTGRES_USER
              value: test
            - name: POSTGRES_PASSWORD
              value: testdbtest
          name: postgres-client-image
          image: postgres
```

Creating namespace psql

sudo kubectl create namespace psql

We can view the created namespace using

sudo kubectl get namespace

```

bibek@bibek-LfTech:~/assignment/mongo$ sudo kubectl get namespace
[sudo] password for bibek:
NAME                STATUS    AGE
default             Active   2d18h
kube-node-lease     Active   2d18h
kube-public         Active   2d18h
kube-system         Active   2d18h
psql                Active   6m3s

```

Creating **postgres-pod in cluster PSQL** using **kubectl apply** command

sudo kubectl apply -f postgres.yaml --namespace=psql

```

bibek@bibek-LfTech:~/assignment/mongo/client$ sudo kubectl apply -f postgres.yaml
--namespace=psql
deployment.apps/postgres-client-deployment created
bibek@bibek-LfTech:~/assignment/mongo/client$ sudo kubectl get pods --namespace=psql
NAME                                READY   STATUS    RESTARTS   AGE
postgres-client-deployment-5bc89b7c8b-n2tc4  1/1     Running   0           22s

```

Here we can see client postgres is created and running in namespace psql.

Connecting using psql command in Answer 3