Persistent Volumes

- Refer Here for Persistent Volumes official docs
- There are two types of Provisionings
    - Static Provisioning:
        - A storage space has to be manually created and to be updated in k8s cluster
    - Dynamic Provisioning: (Managed K8s clusters)
        - K8s creates necessary storage dynamically
- Components
    - Persistent Volume
    - Persistent Volume Claim
    - Storage Class

```
export RANDOM_ID="$(openssl rand -hex 3)"
export MY_RESOURCE_GROUP_NAME="myAKSResourceGroup$RANDOM_ID"
export REGION="eastus"
export MY_AKS_CLUSTER_NAME="myAKSCluster$RANDOM_ID"
export MY_DNS_LABEL="ltdevops$RANDOM_ID"
az group create --name $MY_RESOURCE_GROUP_NAME --location $REGION
az aks create \
    --resource-group $MY_RESOURCE_GROUP_NAME \
    --name $MY_AKS_CLUSTER_NAME \
    --node-count 2 \
    --node-vm-size 'Standard_B2s'
az aks get-credentials --resource-group $MY_RESOURCE_GROUP_NAME --name
$MY_AKS_CLUSTER_NAME
```

- aks dynamic provision example Refer Here

- Access Modes: Refer Here

- Lets create a mysql pod with a persistent volume claim Refer Here for the changes

- Exercise:

    - Create a postgresql pod with pvc as done above
    - Repeat the same for mongo db.