Azure CLI & PowerShell Commands Reference for Assignment-3

1. Azure Subscription & Entra ID

```
az account show
az account list --output table
az ad signed-in-user show
```

2. Create Users & Groups

```
az ad user create --display-name "TestUser1" --user-principal-name
testuser1@yourdomain.onmicrosoft.com --password "StrongP@ssword123"
az ad group create --display-name "DevTeam" --mail-nickname "devteam"
az ad group member add --group "DevTeam" --member-id <userObjectId>
```

3. Assign RBAC Role

```
az role assignment create --assignee <userObjectId> --role "Reader" --scope /
subscriptions/<subscription-id>
```

4. Create Custom Role

```
az role definition create --role-definition custom-role-definition.json
```

Sample `custom-role-definition.json` :

```
{
  "Name": "CustomStorageReader",
  "IsCustom": true,
  "Description": "Can read storage account information",
  "Actions": [
    "Microsoft.Storage/storageAccounts/read"
  ],

  "NotActions": [],
  "AssignableScopes": [
    "/subscriptions/<subscription-id>"
  ]
}
```

5. Create Azure Policy

```
az policy definition create --name "require-tag" --rules policy-rules.json -
params policy-params.json --mode All
az policy assignment create --name "require-tag" --policy "require-tag" -scope
/subscriptions/<subscription-id>
```

6. Azure Key Vault Commands

```
az keyvault create --name myKeyVault --resource-group myResourceGroup -location
eastus
az keyvault secret set --vault-name myKeyVault --name "MySecret" --value
"MySecretValue"
az keyvault secret show --vault-name myKeyVault --name "MySecret"
```

7. Create VM via CLI

```
az vm create \
  --resource-group myResourceGroup \
  --name myVM \
  --image UbuntuLTS \
  --admin-username azureuser \
  --generate-ssh-keys
```

8. Create VM via PowerShell

```
New-AzVM -ResourceGroupName "myResourceGroup" -Name "myWinVM" -Location "EastUS"
\
-ImageName "Win2019Datacenter" -Credential (Get-Credential) -Verbose
```

9. Configure Backup & Alerts

```
az backup protection enable-for-vm --resource-group myResourceGroup --
vaultname myRecoveryVault --vm myVM --policy-name DefaultPolicy az monitor
metrics alert create \
  --name "HighCPUAlert" \
  --resource-group myResourceGroup \
  --scopes "/subscriptions/<subscription-id>/resourceGroups/myResourceGroup/
providers/Microsoft.Compute/virtualMachines/myVM" \
  --condition "avg Percentage CPU > 80" \
  --description "Alert when CPU usage is high" \
  --action-groups <actionGroupId>
```