**First Scenario -> Your team needs to deploy a virtual machine in azure portal to test the new software application. Here the team has requested both windows and Linux virtual machines.**

**Question: how could u setup these virtual machines? and what considerations are needed for pricing an OS license?**

**Key requirements:**

Deploy a virtual machine, Windows and Linux virtual machine, Pricing an OS license.

**Azure services:**

App Service

App Service (Linux)

Azure Virtual Machines

Azure Cost Management

Azure Availability Zones

**Second Scenario -> The IT security team has requested the sensitive data stored in a azure storage account the encrypted to meet compliance requirements**

**Question: How could you ensure the data stored in azure storage is encrypted, and what encryption types are available.**

**Key requirements:**

Data stored, encrypted data.

**Azure Services:**

Azure Key Vault

Azure Blob Storage.

Azure Storage Service Encryption.

Azure Active Directory (AAD).

Azure Security Center.

**Third Scenario -> Your responsible for setting up devops pipeline in azure devops for your application. The pipeline must deploy code to an azure app service and notify the team if the deployment fails.**

**Question: How could you configure this pipeline to meet this requirements?**

**Key requirements:**

Devops pipeline, deployment and notification.

**Azure Services:**

CI/CD Pipeline.

Check Azure Activity Log

Azure DevOps Pipeline Notifications

**Fourth scenario -> Your organization in on premises SQL Database to azure. The database must remain accessible during migration with minimal downtime.**

**Question: Which azure service would you use, and how could you perform the migration?**

**Key requirements:**

SQL database

Migration with minimal downtime.

**Azure Services:**

Azure SQL Database

Azure DB Migration Service

Azure Site Recovery for On-Premises Databases.