# **DP201 - Designing an Azure Data Platform Solution**

## Lab 5 – Designing for Scale and Resiliency

**Exercise 3**

**Task 1: Design a highly available solution**

Use the table below to document the high availability features that can support the requirements for AdventureWorks. The choice should be justified.

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement** | **Service** | **Feature** | **Justification** |
| AdventureWorks Website | Web App | Scaling Up the plan | Increased number of requests made possible |
| Cosmos DB | Cosmos DB | Increasing the number of Request Units per second + Portioning | Increasing the number of RUs/s allows for processing a largest number of requests in less time, and portioning makes parallel jobs possible, making queries faster |
| Azure Synapse Analytics | Azure Synapse Analytics | Increase the number of DWUs, using SSD disks | Higher availability, increasing the number of DWUs also increase the number of possible IOps, which would be specially needed during peak terms |
| Blob Storage | Blob Storage | Using Azure Cache for Redis | Allows faster responses upon an increasing number of requests during peak terms |