**Sentia Assessment**

**The assignment:**

Sign up for a free Azure account at https://azure.microsoft.com/nl-nl/free/

Using ARM templates and best practices, create the following:

* An Azure Datalake Gen 2 storage account.
* A key vault with a secret
* A virtual network
* A web app that can access both the datalake storage and the key vault secret
* A load balancer that sits between the web app and the internet
* Use tags to group the resources.

Developed the ARM templates to deploy the following resources. Refer the ARM templates along with this documentation.

1. Datalake Gen 2 Storage Account
2. Keyvault
3. Virtual Network
4. Python Web Application
5. External Load Balancer

Apart from ARM templates, I created the following scripts:

1. **DeployResources.ps1**

PowerShell script to deploy multiple resources using ARM templates

1. **GroupResources.ps1**

PowerShell script to group the Azure resources based on the tags.

1. **python\_webapp.py**

Python API application to access datalake store and keyvault

**Note:** This script will work only with Datalake store Gen 1 as Microsoft has not released the python SDK for Datalake Gen 2 storage yet.