Business Context:

Containers, along with containerization technology like Docker and Kubernetes, have become increasingly common components in many developers' toolkits. The goal of containerization, at its core, is to offer a better way to create, package, and deploy software across different environments in a predictable and easy-to-manage way.

Kubernetes provides a distributed platform for containerized applications. You build and deploy your own applications and services into a Kubernetes cluster, and let the cluster manage the availability and connectivity.

Learning Outcomes:

1) Create Docker Container Images
2) Create Container Registry
3) Deploy container on Kubernetes Cluster

Problem statement

Deploy a sample application to a Kubernetes Cluster by following the steps below

1) Clone the following application from the GitHub repository https://github.com/Azure-Samples/azure-voting-app-redis.git
2) Create a docker image using the files cloned above
3) Create an Azure Container Registry(ACR) Instance
4) Push the image created above to the registry using the tag "latest"
5) Create a Kubernetes Cluster with 3 nodes
6) Run the created image as a container in the cluster created above

Note:

- Other required values can be set as per your discretion.
- Submission of this assessment shall be done in the form of a pdf document containing the labeled screenshots as outlined in the marks distribution section.

Marks Distribution:

1)	Screenshots of creating Docker Image	10 marks
2)	Screenshots of enabling creating the ACR instance	10marks
3)	Screenshots of pushing the image to ACR	10 marks
4)	Creating the Kubernetes Cluster	10 marks
5)	Running the container as a cluster	10 marks