AZURE DATA SCIENTIST ASSOCIATE – (DP-100)

1.Introduction to Azure Machine Learning (AML)
1.1   Overview of Azure Machine Learning
1.2   Azure Machine Learning Workspaces
1.3   Azure Machine Learning Services and CLI

2. Data Preprocessing and Data Wrangling
2.1   Data Exploration and Visualization
2.2   Data Preprocessing Techniques
2.3   Data Transformation and Feature Engineering

3 Machine Learning with Azure ML
3.1   Supervised vs. Unsupervised Learning
3.2   Model Training and Evaluation
3.3   Hyperparameter Tuning
3.4   AutoML (Automated Machine Learning)

4.Building and Training Machine Learning Models
4.1   Choosing the Right Algorithm
4.2   Model Training with Azure ML
4.3   Model Evaluation and Selection

5.Automated Machine Learning (AutoML)
5.1   Introduction to AutoML
5.2   Automated Feature Engineering
5.3   AutoML Experimentation and Optimization

6. Model Deployment and Management
6.1   Deploying Machine Learning Models in Azure

6.2   Monitoring and Managing Deployed Models
6.3   Scaling and Updating Models

7.Responsible AI

7.1   Fairness and Bias in Machine Learning
7.2   Interpreting Machine Learning Models
7.3   Explainable AI (XAI) in Azure

8.MLOps (Machine Learning Operations)

8.1   Introduction to MLOps
8.2   Building CI/CD Pipelines for ML
8.3   Model Versioning and Monitoring

9.Working with Datasets and Datastores

9.1   Datasets and Datastores in Azure ML
9.2   Data Ingestion and Management
9.3   Data Versioning and Data Monitoring

10. Azure Cognitive Services Integration

10.1   Integrating Azure Cognitive Services with ML
10.2   Using Cognitive Services for NLP and Computer Vision
10.3   Building AI-powered Applications

11.Time Series Forecasting with Azure ML

11.1   Time Series Forecasting Concepts
11.2   Building Time Series Models with Azure ML

12.Anomaly Detection

12.1   Introduction to Anomaly Detection
12.2   Building Anomaly Detection Models