

Latest Version: 13.1

Question: 1

A Machine Learning Specialist is working with multiple data sources containing billions of records that need to be joined. What feature engineering and model development approach should the Specialist take with a dataset this large?

- A. Use an Amazon SageMaker notebook for both feature engineering and model development
- B. Use an Amazon SageMaker notebook for feature engineering and Amazon ML for model development
- C. Use Amazon EMR for feature engineering and Amazon SageMaker SDK for model development
- D. Use Amazon ML for both feature engineering and model development.

Answer: B

Question: 2

A Machine Learning Specialist has completed a proof of concept for a company using a small data sample and now the Specialist is ready to implement an end-to-end solution in AWS using Amazon SageMaker. The historical training data is stored in Amazon RDS. Which approach should the Specialist use for training a model using that data?

- A. Write a direct connection to the SQL database within the notebook and pull data in
- B. Push the data from Microsoft SQL Server to Amazon S3 using an AWS Data Pipeline and provide the S3 location within the notebook.
- C. Move the data to Amazon DynamoDB and set up a connection to DynamoDB within the notebook to pull data in
- D. Move the data to Amazon ElastiCache using AWS DMS and set up a connection within the notebook to pull data in for fast access.

Answer: B

Question: 3

Which of the following metrics should a Machine Learning Specialist generally use to compare/evaluate machine learning classification models against each other?

- A. Recall
- B. Misclassification rate
- C. Mean absolute percentage error (MAPE)
- D. Area Under the ROC Curve (AUC)

Answer: D

Reference: <https://docs.aws.amazon.com/machine-learning/latest/dg/multiclass-model-insights.html>

Question: 4

A Machine Learning Specialist is using Amazon SageMaker to host a model for a highly available customer-facing application .

The Specialist has trained a new version of the model, validated it with historical data, and now wants to deploy it to production To limit any risk of a negative customer experience, the Specialist wants to be able to monitor the model and roll it back, if needed

What is the SIMPLEST approach with the LEAST risk to deploy the model and roll it back, if needed?

- A. Create a SageMaker endpoint and configuration for the new model version. Redirect production traffic to the new endpoint by updating the client configuration. Revert traffic to the last version if the model does not perform as expected.
- B. Create a SageMaker endpoint and configuration for the new model version. Redirect production traffic to the new endpoint by using a load balancer Revert traffic to the last version if the model does not perform as expected.
- C. Update the existing SageMaker endpoint to use a new configuration that is weighted to send 5% of the traffic to the new variant. Revert traffic to the last version by resetting the weights if the model does not perform as expected.
- D. Update the existing SageMaker endpoint to use a new configuration that is weighted to send 100% of the traffic to the new variant Revert traffic to the last version by resetting the weights if the model does not perform as expected.

Answer: A

Question: 5

A manufacturing company has a large set of labeled historical sales data The manufacturer would like to predict how many units of a particular part should be produced each quarter Which machine learning approach should be used to solve this problem?

- A. Logistic regression
- B. Random Cut Forest (RCF)
- C. Principal component analysis (PCA)
- D. Linear regression

Answer: D