### Question 1

Automated tools, frameworks, and processes for all stages of the data analytics process are part of the Data Engineer's ecosystem. What role do data integration tools play in this ecosystem?

Store high-volume day-to-day operational data in data repositories

Combine data from multiple sources into a unified view that is accessed by data consumers to query and manipulate data

Cover the entire journey of data from source to destination

Conduct complex data analytics

#### Correct

Data Integration tools provide a unified view to data collected from disparate sources so that it can be accessed via a single interface for query and manipulation by data consumers.

#### Question 2

Which of these data sources is an example of semi-structured data?

**Documents** 

#### **Emails**

Network and web logs

Social media feeds

#### Correct

Emails are a source of semi-structured data as they have a mix of data with some organizational properties but do not follow a rigid schema.

### Question 3

Which one of the provided file formats is commonly used by APIs and Web Services to return data? XML

## **JSON**

XLS

Delimited file

### Correct

JSON is the format that is most used by APIs and Web Services to return data.

### Question 4

What is one example of the relational databases discussed in the video?

Spreadsheet

### **SOL Server**

Flat files

XML

#### Correct

SQL Server is one of the examples of relational databases shared in the video.

### Question 5

Which of the following languages is one of the most popular querying languages in use today?

Java

Python

# **SQL**

R

# Correct

SQL, or Structured Query Language, is one of the most popular querying languages in use today.

### Question 1

There are two main types of data repositories – Transactional and Analytical. For high-volume day-to-day operational data such as banking transactions, Transactional, or OLTP, systems are the ideal choice.

### True

False

### **Correct**

Transactional, or OLTP, systems are designed and optimized for handling high-volume transactions.

#### Question 2

Which of the following is an example of unstructured data?

Zipped files

**XML** 

#### Video and Audio files

Spreadsheets

#### Correct

Video and audio files are examples of unstructured data.

#### Question 3

Which one of these file formats is independent of software, hardware, and operating systems, and can be viewed the same way on any device?

XLSX

### **PDF**

Delimited text file

XML

#### Correct

PDF format is independent of software, hardware, and operating systems, and can be viewed the same way on any device.

# Question 4

Which data source can return data in plain text, XML, HTML, or JSON among others?

Delimited text file

XML

PDF

# **APIs**

#### **Correct**

APIs can return data in a wide variety of formats such as plain text, XML, HTML, or JSON among others.

### Question 5

In the data engineer's ecosystem, languages are classified by type. What are shell and scripting languages most commonly used for?

# Automating repetitive operational tasks

Querying data

**Building apps** 

Manipulating data

# Correct

Shell and scripting languages are commonly used for automating repetitive operational tasks.