

✔

Congratulations! You passed!

Grade

received 80%

Latest Submission

Grade 80%

To pass 70% or

higher

Go to next item

1.

In the modern data ecosystem, what is one of the key challenges when organizing data within a data repository?

0 / 1 point

- ☐ Marketability
- ☐ Replicability
- ☒ Scalability
- ☐ Security

↗ Expand



Incorrect

Refer to the Modern Data Ecosystem video.

2.

In the data ecosystem, what are data scientists responsible for?

1 / 1 point

- ☐ Providing business solutions based on insights and predictions
- ☒ Creating predictive models based on the data
- ☐ Converting raw data from disparate sources into usable data
- ☐ Using the data to generate insights and identify patterns

↗ Expand



Correct

Data scientists analyze data for actionable insights and build machine learning or deep learning models that train on past data to create predictive models.

3.

Which of the following data sources contain structured data?

1 / 1 point

- ☐ Sensors
- ☐ Tweets
- ☐ Emails
- ☒ Spreadsheets

↗ Expand



Correct

Spreadsheets are an example of structured data since data within a spreadsheet has a well-defined structure that can be represented in a tabular manner with rows and columns.

4.

SQL is ideal for which of the following tasks?

1 / 1 point

- ☐ Automating repetitive tasks that are time-consuming to execute one line at a time
- ☒ Accessing information from relational databases
- ☐ Developing statistical software and performing data analytics
- ☐ Creating mobile and desktop web applications quickly

↗ Expand



Correct

SQL is a querying language designed for accessing and manipulating information mostly, but not exclusively, from relational databases.

5.

What is the primary advantage of using NoSQL databases?

1 / 1 point

- ☒ Ability to handle large volumes of structured, semi-structured, and unstructured data
- ☐ Ease of use for export and import options, simplifying backup and restore
- ☐ Maturity of the technology with extensive documentation and support
- ☐ Compliance with principles of atomicity, consistency, isolation, and durability (ACID)

↗ Expand



Correct

The primary advantage of NoSQL is its ability to handle large volumes of structured, semi-structured, and unstructured data.

6.

Which of the following is a typical usage scenario for data integration?

1 / 1 point

- ☐ Disaster recovery
- ☐ Online transaction processing
- ☒ Master data management
- ☐ Front-end development

↗ Expand



Correct

Data integration has several usage scenarios, such as data consistency across applications, master data management, data sharing between enterprises, and data migration and consolidation.

7.

In a data platform architecture, the data storage and integration layer performs which of the following tasks?

1 / 1 point

- ☒ Makes data available for processing
- ☐ Maintains information about the data
- ☐ Delivers data to data consumers
- ☐ Supports querying tools and programming languages

↗ Expand



Correct

The data storage and integration layer makes data available for processing in both streaming and batch modes.

8.

When using SQL, which of the following functions can you use to count the number of unique values in a column?

0 / 1 point

- ☒ COUNT
- ☐ UNIQUE
- ☐ DISTINCT
- ☐ PRIMARY KEY

↗ Expand



Incorrect

Refer to the Querying and Analyzing Data video.

9.

What role does an authentication system play in ensuring compliance with data governance regulations?

1 / 1 point

- ☐ Converts user session data to an encoded format
- ☐ Provides audit reports on which users access which data
- ☐ Ensures data access only for users who are authorized
- ☒ Verifies that users are who they say they are

↗ Expand



Correct

Authentication systems verify that you are who you say you are, and they accomplish this using passwords, tokens, biometrics, or a combination of these.

10.

Which of the following is a mainstay for your career in data engineering?

1 / 1 point

- ☐ Academic degree
- ☐ Professional certification
- ☒ Technical abilities
- ☐ Presentation experience

↗ Expand



Correct

You can start a career in data engineering through various paths. However, your technical abilities will be your mainstay in this profession, along with a broad understanding of the scope and use of data in business.