

Final Quiz

1. In the modern data ecosystem, what is one of the key challenges when stakeholders pull data from the enterprise data repository?

1 / 1 point

- ☐ Establishing that the compiled data scales at a sufficient rate
- ☐ Checking that all the raw data resides in a centralized repository
- ☐ Guaranteeing that the organizational scheme complies with security standards
- ☒ Ensuring that the method of data access meets stakeholder needs

 Expand

 **Correct**

When stakeholders pull data from the enterprise data repository, one of the key challenges is ensuring that the method of data access meets stakeholder needs.

2. In the data ecosystem, what are data analysts responsible for?

1 / 1 point

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

 Expand

 **Correct**

Data analysts use the collected data to generate insights.

3. Which of the following data sources contain semi-structured data?

1 / 1 point

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

 Expand

 **Correct**

An email contains semi-structured data. An email has some structured data, such as the name of the sender and recipient, but it also has unstructured data, specifically the contents of the email.

4. SQL is ideal for which of the following tasks?

1 / 1 point

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

 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
- ☐ Compliance with principles of atomicity, consistency, isolation, and durability (ACID)
- ☐ Maturity of the technology with extensive documentation and support

 Expand

 Correct

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

6. What is the function of a data integration platform?

1 / 1 point

- ☐ Locate specific data within a repository and display this data
- ☐ Extract raw data, transform the data, then load it into a repository
- ☒ Combine disparate sources of data into a unified view of the data
- ☐ Move data from its source to a destination data lake or application

 Expand

 Correct

Data integration platforms combine disparate sources of data, physically or logically, to provide a unified view of the data for analytics purposes.

7. In a data platform architecture, the data collection, or ingestion, layer performs which of the following tasks?

1 / 1 point

- ☒ Maintains metadata
- ☐ Supports querying tools
- ☐ Transforms data
- ☐ Delivers processed data

 Expand

✓ Correct

The data collection, or ingestion, layer uses the metadata repository to maintain information about the data collected.

8. When using SQL, for what purpose should you use the STDDEV function?

1 / 1 point

- ☒ Measuring how spread out the values are in a data set
- ☐ Calculating the rank of values in a data set
- ☐ Determining the first and last values in a data set
- ☐ Returning a subset of specific values in a data set

 Expand

✓ Correct

Use the STDDEV() function to measure how spread out the numbers are in a data set. This function calculates the standard deviation.

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

1 / 1 point

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

 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

- ☐ Extensive experience in public speaking and delivering presentations
- ☐ Professional certifications from respected online programs
- ☒ Broad understanding of the scope and use of data in business
- ☐ Master's degree in computer science or engineering

 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.