1. In the modern data ecosystem, what is the first step to working with data? 1 / 1 point

- Collaborating with stakeholders and acting on their insights
- Pulling a copy of the data from the original sources into a data repository
- Using tools, applications, and infrastructure to disseminate data
- Organizing and optimizing the data and ensuring it meets compliance requirements

Expand

Correct
In the modern data ecosystem, the first step to working with data is to pull a copy of the data from the original sources into a data repository.

2. In the data ecosystem, what are data analysts responsible for? 1 / 1 point

- Creating predictive models based on the data
- Converting raw data from disparate sources into usable data
- Providing business solutions based on insights and predictions
- 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 unstructured data? **1 / 1 point**

- Emails
- Sensors
- Videos
- Spreadsheets

Expand

Correct
A video file contains unstructured data. The file's content does not have a defined structure.

4. R 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
Widely used for developing statistical software and performing data analytics, R is especially known for its ability to create compelling visualizations, giving it an edge over some of the other languages that data professionals use.

5. Document-based databases are ideal for storing which type of data? 1 / 1 point

- (•) Medical records
- ( ) User preferences
- ( ) Social network information
- ( ) Weather data

Expand

Correct
Document-based databases are preferable for eCommerce platforms, medical records storage, CRM platforms, and analytics platforms.

6. What is the relationship between data pipelines and data integration? 1 / 1 point

- ( ) Data integration is a process that functions separately from the data pipeline.
- (•) A data pipeline is a process used to perform data integration.
- ( ) Data integration is a process used to create a data pipeline.
- ( ) A data pipeline is a subprocess within data integration.

Expand

Correct
A data pipeline is a process used to perform data integration, while ETL is a process within data integration.

7. In a data platform architecture, the data storage and integration layer performs which of the following tasks? 1 / 1 point

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

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

- UNIQUE
- COUNT
- PRIMARY KEY
- DISTINCT

Expand

Incorrect
Refer to the Querying and Analyzing Data video.

9. What role does data erasure software play in ensuring compliance with data governance regulations? **1 / 1 point**

- Deletes data
- Updates data
- Edits data
- Overwrites data

Expand

Correct
Data erasure software overwrites the data, permanently clearing the data from the system. This method for discarding data is preferable to simply deleting the data since you can still retrieve deleted data.

10. Which of the following is a mainstay for your career in data engineering? **1 / 1 point**

- Professional certifications from respected online programs
- Extensive experience in public speaking and delivering presentations
- 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.