

1. What is a CSV file?

1 / 1 point

- ☐ CSV is a method of JavaScript Object Notation.
- ☒ CSV files are rows of data or values separated by commas.
- ☐ CSV files are a standard way to store data across platforms.
- ☐ CSV makes data readily available for analytics, dashboards, and reports.

☒ **Correct**
Correct. CSV, or Comma Separated Value, files are rows of data or values separated by commas.

2. What are residuals?

1 / 1 point

- ☐ Residuals are a method for handling identified outliers.
- ☒ Residuals are the difference between the actual values and the values predicted by a given model.
- ☐ Residuals are data removed from the dataframe.
- ☐ Residuals are a method to standardize data.

☒ **Correct**
Correct. Residuals are model prediction errors.

3. If removal of rows or columns of data is not an option, why must we ensure that information is assigned for missing data?

1 / 1 point

- ☐ Assigning information for missing data improves the accuracy of the dataset.
- ☒ Most models will not accept blank values in our data.
- ☐ Missing data may bias the dataset.
- ☐ Information must be assigned to prevent outliers.

☒ **Correct**
Correct. Information must be given for every feature and label in a dataset.

4. What are the two main data problems companies face when getting started with artificial intelligence/ machine learning?

1 / 1 point

- ☐ Outliers and duplicated data
- ☐ Data sampling and categorization
- ☐ Lack of training and expertise
- ☒ Lack of relevant data and bad data

☒ **Correct**
Correct. Companies need to collect and organize their data to make it ready before leveraging it for machine learning.

5. What does SQL stand for and what does it represent?

1 / 1 point

- ☐ SQL stands for Structured Query Language, and it represents databases that are not relational, they vary in structure.
- ☐ SQL stands for Sequential Query Language, and it represents a set of relational databases with fixed schemas.
- ☐ SQL stands for Sequential Query Language, and it represents a set of sequential databases with fixed schemas.
- ☒ SQL stands for Structured Query Language, and it represents a set of relational databases with fixed schemas.

☒ **Correct**
Correct. SQL is the set of highly structured relational databases with fixed schema.

6. What does NoSQL stand for and what does it represent?

1 / 1 point

- ☐ NoSQL stands for Not-only SQL, and it represents a set of databases that are relational, therefore, they have fixed structure.
- ☐ NoSQL stands for Non-Structured Query Language, and it represents a set of relational databases with fixed schemas.
- ☐ NoSQL stands for Non-Structured Query Language, and it represents a set of non-relational databases with varied schemas.
- ☒ NoSQL stands for Not-only SQL, and it represents a set of databases that are not relational, therefore, they vary in structure.

☒ **Correct**
Review the Feature Engineering and Variable Transformation-Background video.

7. What is a JSON file?

1 / 1 point

- ☐ JSON stands for JavaString Object Notation, and they have very similar structure to Python Dictionaries.
- ☐ JSON stands for JavaScript Object Notation, and it is a non-standard way to store the data across platforms.
- ☐ JSON stands for JavaString Object Notation, and it is a standard way to store the data across platforms.
- ☒ JSON stands for JavaScript Object Notation, and it is a standard way to store the data across platforms.

☒ **Correct**
Correct. JSON stands for JavaScript Object Notation, and those files are going to be a standard way to store data across platforms.

8. What is meant by the Messy Data?

1 / 1 point

- ☐ Duplicated or unnecessary data.
- ☐ Inconsistent text and typos.
- ☐ Missing data.
- ☒ All of the above.

☒ **Correct**
Correct. Duplicated or unnecessary data, inconsistent text and typos, and missing data are all examples of the messy data.

9. What is an outlier?

1 / 1 point

- ☐ Outlier is a data point that has the highest or lowest value in the dataset.
- ☒ Outlier is an observation in dataset that is distant from most other observations.
- ☐ Outlier is a data point that is very close to the mean value of all observations.
- ☐ Outlier is a data point that does not belong in our dataset.

☒ **Correct**
Correct. An outlier is an observation in data that is distinct from most other observations.

10. How do we identify outliers in our dataset?

1 / 1 point

- ☒ We can identify outliers both visually and with statistical calculations.
- ☐ We can identify outliers only by calculating the minimum and maximum values in the dataset.
- ☐ We can only identify outliers visually through building plots.
- ☐ We can only identify outliers by using some statistical calculations.

☒ **Correct**
Correct. We can use plots, such as histograms, density, and box plots, as well as making some statistical calculations, such as calculating the interquartile ranges.