

1. What is a CSV file?

1 / 1 point

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

☒ 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 to standardize data.
- ☒ 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 for handling identified outliers.

☒ 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.
- ☐ Information must be assigned to prevent outliers.
- ☐ Missing data may bias the dataset.

☒ 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

- ☐ Data sampling and categorization
- ☐ Lack of training and expertise
- ☐ Outliers and duplicated data
- ☒ 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 Sequential Query Language, and it represents a set of sequential databases with fixed schemas.
- ☐ SQL stands for Sequential Query Language, and it represents a set of relational databases with fixed schemas.
- ☒ SQL stands for Structured Query Language, and it represents a set of relational databases with fixed schemas.
- ☐ SQL stands for Structured Query Language, and it represents databases that are not relational, they vary in structure.

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

☒ Correct

Review the Feature Engineering and Variable Transformation-Background video.

7. What is a JSON file?

1 / 1 point

- ☐ 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 they have very similar structure to Python Dictionaries.
- ☒ JSON stands for JavaScript Object Notation, and it is a 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.

☒ 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 is very close to the mean value of all observations.
- ☐ Outlier is a data point that does not belong in our dataset.
- ☐ 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.

☒ 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 only identify outliers visually through building plots.
- ☐ We can identify outliers only by calculating the minimum and maximum values in the dataset.
- ☐ 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.