

1. What is true between data modeling and the formatting of the data? 1 / 1 point

- ☐ There is a one to one correspondence between formatting data and data modeling. For every model of data, there is only one way to store the data.
- ☒ The data does not necessarily need to be formatted in a way that represents the data model. Just so long as it can be extrapolated.
- ☐ There is always one specific schema for storing model data that is the best and preferred method for the specific data representation.

✔ Correct
For more information related to this concept, please click [here](#). ↗

2. What is streaming? 1 / 1 point

- ☐ Calculating results using real time data otherwise known as streaming data.
- ☐ Using sensors to manipulate the system, such as a smart car being able to drive by itself using sensors to detect road hazards.
- ☒ Utilizing real time data to compute and change the state of an application continuously.
- ☐ Using static data stored from a real time source in order to process and guide the application.

✔ Correct
For more information related to this concept, please click [here](#). ↗

3. Of the following, what best describes the properties of working with streaming data? 1 / 1 point

- ☒ Does not ping the source interactively for a response upon receiving the data.

✔ Correct
For more information related to this concept, please click [here](#). ↗

- ☐ Always unbounded in sequence, in other words, data is not guaranteed to be in order.

- ☒ Data manipulation is near real time.

✔ Correct
For more information related to this concept, please click [here](#). ↗

- ☒ Small time windows for working with data.

✔ Correct
For more information related to this concept, please click [here](#). ↗

- ☒ Independent computations that do not rely on previous or future data.

✔ Correct
For more information related to this concept, please click [here](#). ↗

- ☐ Data is always utilized for streaming the application.

4. What is a characteristic of streaming data? 1 / 1 point

- ☐ The data is finite and requires only finite time and space to process the data.
- ☐ The data is unbounded in size and the size determines the time and space of processing the data.
- ☐ Data is finite in size and size determines the time and space of processing the data.
- ☒ Data is unbounded in size but requires only finite time and space to process it.

✔ Correct
For more information related to this concept, please click [here](#). ↗

5. What type of algorithm is required for analyzing streaming data? 1 / 1 point

- ☐ Accurate and Consistent
- ☐ Fast and Complex
- ☐ Accurate and Memory Efficient
- ☒ Fast and Simple

✔ Correct
For more information related to this concept, please click [here](#). ↗

6. What is lambda architecture? 1 / 1 point

- ☐ A specific method for processing streaming data using special real time processes.
- ☐ A specific hardware architecture for a server made specifically for processing real time data.
- ☒ A method to process streaming data by utilizing batch processing and real time processing.

✔ Correct
For more information related to this concept, please click [here](#). ↗

7. Of the following, which best represents the challenge regarding the size and frequency of data? 1 / 1 point

- ☐ There may not be data to produce the notion of size and frequency.
- ☒ The size and frequency of the streaming data may be sporadic.
- ☐ The size and frequency of the streaming data may be too small.

✔ Correct
For more information related to this concept, please click [here](#). ↗

8. What is the difference between data lakes and data warehouses? 1 / 1 point

- ☐ Data lakes contain only files while data warehouses contain only databases.
- ☐ Data lakes utilize hierarchical systems while data warehouses use object storage.
- ☒ Data lakes house raw data while data warehouses contain pre-formatted data.

✔ Correct
For more information related to this concept, please click [here](#). ↗

9. What is schema-on-read? 1 / 1 point

- ☒ Data is stored as raw data until it is read by an application where the application assigns structure.
- ☐ Another name for data lakes.
- ☐ The process where formatted data is given structure when read.
- ☐ The process where data is pre-formatted prior to being read but the schema is loaded on read.

✔ Correct
For more information related to this concept, please click [here](#). ↗