

1. How does data flow through pipelines?

1 / 1 point

- ☒ Data packets
- ☐ Files
- ☐ Software processes
- ☐ Processing threads

✓ **Correct**

Correct, data flows through a pipeline in the form of data packets.

2. Which of the following pipeline monitoring considerations affects the amount of data that passes through the pipeline over time?

1 / 1 point

- ☐ Logging and alerting system
- ☐ Utilization
- ☐ Latency
- ☒ Throughput

✓ **Correct**

Correct, this is the volume of data passing through the pipeline over time.

3. Which of the following data pipelines corresponds with the fraud detection use case?

1 / 1 point

- ☐ Micro-batch data pipeline
- ☒ Streaming data pipeline
- ☐ Batch data pipeline
- ☐ Lambda architectures

✓ **Correct**

Correct, streaming data pipelines are used for fraud detection.

4. Which streaming data pipeline tool allows you to build applications using the Streams Processing Language (SPL)?

1 / 1 point

- ☒ IBM Streams
- ☐ Apache Samza
- ☐ SQLstream
- ☐ Apache Spark

✓ **Correct**

Correct, IBM Streams lets you build real-time analytical applications using the Streams Processing Language, or SPL, plus Java, Python, or C++.

5. Pipelines that incorporate parallelism are referred to as being\_\_\_\_\_?

1 / 1 point

- ☐ Static
- ☐ Aligned
- ☐ Linear
- ☒ Dynamic or non-linear

✓ **Correct**

Correct, pipelines that incorporate parallelism are referred to as being dynamic or non-linear.

6. Batch data pipelines usually run periodically on fixed schedules. Which of the following is another method to run these?

1 / 1 point

- ☐ Flags
- ☐ Manually
- ☒ Triggers
- ☐ Error occurrence

✓ **Correct**

Correct, Batch processes typically operate periodically on a fixed schedule – ranging from hours to weeks apart. They can also be initiated based on triggers, such as when the data accumulating at the source reaches a certain size.

7. Which of the following common features of modern ETL and ELT products is known as "no-code"?

1 / 1 point

- ☐ Fully automated
- ☐ Data crawling
- ☐ Security
- ☒ Drag-and-drop

✓ **Correct**

Correct, a drag-and-drop GUI for specifying rules and data pipeline flows – also known as "no-code" ETL.

8. Which of the following data pipeline use cases is the simplest?

1 / 1 point

- ☒ File backup
- ☐ Send/receive messages
- ☐ Raw data preparation
- ☐ Transactional record movement

✓ **Correct**

Correct, the simplest pipeline is one which has no transformations and is used to copy data from one location to another, as in file backups.

9. Latency is the total time it takes for a single packet of data to pass through the pipeline. Which of the following limits latency?

1 / 1 point

- ☐ Bad data
- ☐ Small data packets
- ☐ Data leak
- ☒ Slowest process

✓ **Correct**

Correct, latency is limited by the slowest process in the pipeline.

10. Micro-batch data pipelines decrease the batch size. Which of the following do micro-batch pipelines **increase**?

1 / 1 point

- ☐ Latency
- ☒ Batch process refresh rate
- ☐ Simple transformation
- ☐ Storage

✓ **Correct**

Correct, the refresh rate of individual batch processes is increased to achieve near-real-time processing.