Quiz 3 - Querying Data, Performance Tuning, and Troubleshooting

1. What are some of the querying techniques you can apply to identify extreme values in a data column? **1 / 1 point**

- ○ Slicing a data set
- ○ Performing partial matches of data values
- ◉ Maximum and Minimum values in a data column
- ○ Aggregation

Correct
Finding the maximum and minimum values in a data column can help you identify extreme values in that column.

2. You can perform partial matches of data values in a data column using: **1 / 1 point**

- ○ Average function
- ◉ Filtering patterns
- ○ Slicing a data set
- ○ Count function

Correct
Finding the maximum and minimum values in a data column can help you identify extreme values in that column.

3. Tools for _____ break up a job into a series of logical steps which are monitored for completion and time to completion. **1 / 1 point**

- ○ Monitoring Query Performance
- ○ Application Performance Monitoring
- ◉ Job-level Runtime Monitoring
- ○ Monitoring the amount of data being processed in a data pipeline

Correct
Job-level runtime monitoring breaks up a job into a series of logical steps and monitors them for completion and time to completion.

4. Database partitioning helps optimize databases for performance. It does this by: **1 / 1 point**

- (●) Dividing large tables into smaller individual tables
- ( ) Tracking request response time and error messages
- ( ) Reducing inconsistencies and anomalies in data
- ( ) Minimizing the number of times a disk needs to be accessed when a query is processed

Correct
Database partitioning is a process by which very large tables are divided into smaller, individual tables. It helps with data manageability and also impacts the speed of querying, cleansing, and analyzing operations on the database.

5. Database normalization is a design technique that helps reduce inconsistencies and anomalies from data. **1 / 1 point**

- (●) True
- ( ) False

Correct
Database normalization helps reduce inconsistencies that arise out of data redundancy and also anomalies arising out of update, delete, and insert operations on databases.