Key Areas for Performance Testing:

1. Data Loading and Query Performance:

- o Measure time to load data and perform calculations.
- Test query execution times using Power BI Performance Analyzer and DAX Studio.

2. Report Rendering Time:

- Test how long it takes for reports to load and render visuals.
- Measure with Power BI Performance Analyzer or browser tools.

3. Data Refresh Time:

- Measure how long it takes for data to refresh in Power BI from external sources (e.g., sensors).
- Use **Power BI Service** or **Data Gateway** to monitor refresh times.

4. Scalability Testing:

- Test performance with increasing data volume (from weeks to months or years of data).
- o Monitor performance as data grows using **Power BI Performance Analyzer**.

5. Concurrency Testing:

- Simulate multiple users interacting with the reports at the same time.
- Use tools like Azure Load Testing to simulate users.

6. User Interaction Performance:

- Measure response time for user interactions (filters, slicers, drilldowns).
- o Test how quickly interactions update the visuals.