Data Analyst Interview Questions and Answers

1. **What is Data Cleaning?**

Data cleaning is the process of detecting and correcting inaccurate, incomplete, or inconsistent data to improve data quality.

2. **What is the difference between Primary Key and Foreign Key?**

Primary key uniquely identifies each record in a table, whereas a foreign key links two tables together.

3. **What is Normalization?**

Normalization is the process of organizing data to reduce redundancy and improve data integrity.

4. **What is a JOIN in SQL?**

JOIN combines rows from two or more tables based on a related column between them.

5. **Explain INNER JOIN.**

INNER JOIN returns only the matching rows between tables.

6. **What is LEFT JOIN?**

LEFT JOIN returns all rows from the left table and matching rows from the right table.

7. **What is Data Visualization?**

Data visualization is presenting data in graphical format to help understand patterns and insights.

8. **What is a Pivot Table?**

A pivot table summarizes and reorganizes data, usually by aggregating values.

9. **What is Correlation?**

Correlation measures the relationship between two variables, ranging from -1 to +1.

10. **What tools are commonly used by Data Analysts?**

Excel, SQL, Python, Power BI, Tableau, Pandas, NumPy.