# Power BI - Interview Questions 1-3 year exp

### **Power BI Basics and Concepts**

1. What is Power BI, and why is it used?
2. What are the different components of Power BI?
3. What is the difference between Power BI Desktop, Power BI Service, and Power BI Mobile?
4. What is a Power BI dashboard, and how is it different from a report?
5. Explain the Power BI architecture.
6. What is the purpose of Power Query in Power BI?
7. How do you schedule data refresh in Power BI?
8. What are the different data sources supported by Power BI?
9. What are content packs in Power BI?
10. What are the limitations of Power BI?

### **Data Transformation and Cleaning**

1. How do you use Power Query for data transformation?
2. What is the difference between **Merge** and **Append** in Power Query?
3. How do you create and transform columns in Power Query?
4. Explain the difference between **Replace Values** and **Conditional Column** in Power Query.
5. What are parameters in Power Query, and how are they used?
6. How do you handle errors in Power Query transformations?
7. What are calculated columns, and how are they created in Power BI?

### **Data Modeling**

1. What is data modeling in Power BI, and why is it important?
2. What are the different types of relationships in Power BI data modeling?
3. How do you manage cardinality in relationships?
4. What is the difference between a **star schema** and a **snowflake schema**?
5. What is the purpose of the **Date Table** in Power BI, and how do you create it?
6. Explain **Bidirectional Filtering** in Power BI.

### **DAX (Data Analysis Expressions)**

1. What is DAX, and why is it used in Power BI?
2. What is the difference between calculated columns and measures in DAX?
3. How would you calculate Year-over-Year (YoY) growth in Power BI?
4. What are the different types of DAX functions in Power BI?
5. How do you calculate **running totals** using DAX?
6. Explain the difference between the **SUM** and **SUMX** functions.
7. How would you create a KPI to display sales growth against a target?
8. What are DAX **time intelligence functions**, and can you give examples?
9. What is the difference between **ALL** and **ALLEXCEPT** in DAX?
10. How would you calculate profit margin using DAX?

### **Visualization and Dashboard Design**

1. What are slicers, and how are they used in dashboards?
2. How do you use bookmarks and navigation buttons in Power BI dashboards?
3. What are custom tooltips, and how do you create them?
4. What is the purpose of **Drillthrough** in Power BI?
5. How do you use the KPI visual to display key metrics?
6. What is the difference between **Clustered Bar Chart** and **Stacked Bar Chart**?
7. How do you create a **Donut Chart**, and when should it be used?
8. Explain how you use **Map Charts** and configure location data.
9. What is a **Matrix visual**, and how does it differ from a Table visual?
10. How do you optimize a multi-page dashboard for better performance?

### **Advanced Topics**

1. What is Row-Level Security (RLS), and how do you implement it in Power BI?
2. How do you test and validate Row-Level Security configurations?
3. Explain how **Incremental Refresh** works in Power BI.
4. How do you connect Power BI to a PostgreSQL or MySQL server?
5. What are **Composite Models**, and how do they enhance Power BI functionality?
6. How do you share Power BI dashboards with end users securely?
7. How do you troubleshoot performance issues in a Power BI report or dashboard?