**INTERVIEW QUESTIONS WITH ANSWER**

**1. What are the key elements of a dashboard?**

* **KPIs & Metrics:** Show performance indicators (e.g., Sales, Profit, Growth).
* **Visualizations:** Charts, cards, tables for quick insights.
* **Filters/Slicers:** For interactivity and drill-down analysis.
* **Layout & Design:** Clear, uncluttered, and user-friendly.
* **Contextual Info:** Titles, legends, tooltips for clarity.
* **Interactivity:** Drill-through, hover insights, cross-filtering.

**2. What is a KPI?**

* **KPI (Key Performance Indicator):** A measurable value that indicates how effectively a business is achieving its objectives.
* Example: Monthly Sales Revenue, Customer Retention Rate, Profit Margin.

**3. What are slicers in Power BI?**

* **Slicers:** A visual filter in Power BI that allows users to segment and filter data dynamically.
* Example: A slicer on "Region" lets you view sales by North, South, East, or West.

**4. Difference between Power BI and Tableau?**

| **Feature** | **Power BI** | **Tableau** |
| --- | --- | --- |
| **Ease of Use** | Easier for beginners, integrates with Excel | More advanced, steep learning curve |
| **Pricing** | More affordable | Expensive (enterprise focus) |
| **Integration** | Strong with Microsoft ecosystem (Excel, Azure) | Strong with multiple data sources |
| **Visualization** | Good visuals, limited customization | Highly customizable visuals |
| **Deployment** | Cloud + Desktop + Mobile | Cloud + Desktop + Mobile |

**5. How do you make a dashboard interactive?**

* Use **slicers & filters** for user-driven exploration.
* Add **drill-through** and **drill-down hierarchies** (e.g., Year → Month → Day).
* Enable **cross-filtering between visuals**.
* Use **tooltips & bookmarks** for guided storytelling.
* Add **dynamic titles** based on user selections.

**6. How do you deal with large datasets in dashboards?**

* Use **DirectQuery / Live connection** instead of Import.
* Apply **data reduction techniques** (aggregations, summarizations).
* Use **Power Query transformations** to clean before loading.
* Optimize **DAX measures** and avoid heavy calculated columns.
* Use **incremental refresh** for large historical data.

**7. What chart types do you use for trend analysis?**

* **Line Chart:** Best for continuous time-series trends.
* **Area Chart:** Highlights volume changes over time.
* **Bar/Column with time axis:** For comparing time-based categories.
* **Combo Chart (Line + Column):** To compare actuals vs. targets.
* **Scatter Plot (with time dimension):** To analyze correlations over time.