# Power BI Interview Q&A

## What is Power BI, and what are its three main components?

Power BI is Microsoft’s business analytics platform for turning raw data into interactive visual reports and dashboards.  
Three main components:  
1. Power BI Desktop – Windows app for building and designing reports.  
2. Power BI Service – Cloud-based platform for sharing and managing reports.  
3. Power BI Mobile – Mobile apps for viewing/interacting with reports.

## Name two business use cases for Power BI dashboards.

1. Sales performance tracking – Compare regional sales, monitor KPIs, forecast revenue.  
2. Operational efficiency – Track supply chain bottlenecks, inventory levels, and delivery performance.

## How do you download and install Power BI Desktop?

1. Visit https://powerbi.microsoft.com/desktop/  
2. Click 'Download free' or use Microsoft Store.  
3. Run the installer and follow the instructions.

## What is the difference between Power BI Desktop and Power BI Service?

Power BI Desktop: Free Windows app for building reports locally.  
Power BI Service: Cloud platform for hosting, sharing, collaborating, and scheduling refreshes.

## What file extension does a Power BI project use?

.pbix

## Explain the role of Power Query in Power BI.

Power Query is the data transformation and preparation tool in Power BI. It connects to multiple data sources, cleans, and reshapes data before loading.

## Why would a business prefer Power BI over Excel for reporting?

• Interactive dashboards vs. static spreadsheets.  
• Live connections to multiple sources.  
• Better visualization and drill-through.  
• Cloud collaboration without emailing files.

## Describe one limitation of the free version of Power BI.

No ability to share dashboards with others in Power BI Service (Pro license required).

## What is a 'published report' in Power BI Service?

A report uploaded from Power BI Desktop to Power BI Service so it can be accessed by authorized users.

## How does Power BI Mobile enhance accessibility?

Allows viewing and interacting with reports on-the-go from smartphones/tablets.

## Compare Power BI with Tableau — pros and cons.

Power BI Pros: Lower cost, easy Microsoft integration, beginner-friendly.  
Power BI Cons: Performance drops with huge datasets, fewer custom visuals.  
Tableau Pros: Highly customizable visuals, strong analytics, handles large datasets well.  
Tableau Cons: Higher cost, steeper learning curve.

## Explain how Power BI integrates with Azure services.

Pulls data from Azure SQL, Azure Synapse, Data Lake.  
Uses Azure Machine Learning for predictions.  
Refresh data with Azure Data Factory.

## What are 'gateways' in Power BI, and when are they needed?

A gateway bridges on-premises data and Power BI Service.  
Needed for scheduled refresh or live queries from local data sources.

## How would you convince a company to adopt Power BI? (ROI argument)

• Lower license costs.  
• Automates data refresh, saves reporting time.  
• Real-time insights enable faster decisions.  
• Scales with business growth.

## What security features does Power BI offer for sensitive data?

• Row-Level Security (RLS).  
• Encryption at rest and in transit.  
• Azure Active Directory integration.  
• Sensitivity labels and auditing.