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# Power BI Assignment 1

## 1. What do you mean by BI? Explain.

BI stands for Business Intelligence. It refers to the technologies, tools, and practices used to collect, integrate, analyze and understand, and share data to help businesses make better Business-oriented Decisions.

Business intelligence can be used to support a wide range of business decisions, from operational to strategic. It includes various technologies such as data warehousing, analytical processing, and reporting and visualization. The goal of business intelligence is to turn raw data into meaningful and useful information so that it can be used to improve the performance of a business.

## 2. How Power-BI helps in BI, and how does it help Analysts? Explain.

Power BI is a Microsoft tool that allows analysts/users to connect to various data sources, including databases, Excel files, and cloud services like Snowflake and AWS, transform and clean the data, create visualizations and reports, and share them with others. Power BI is used to make it easy for business analysts and other non-technical users to access, analyze, and share data.

With Power BI, analysts can create interactive dashboards and visualizations that provide insights into important business problems. They can also create reports that can be shared with other stakeholders in the organization, such as executives and managers. Power BI also allows users to collaborate on data and analysis, so multiple analysts can work together on the same project.

## 3. Explain Descriptive analytics?

Descriptive analytics is considered the first step of the three main types of analytics: Descriptive, Predictive and Prescriptive analytics. It is a type of Analytics that involves use of data and data visualization techniques to describe and summarize past events. The goal of descriptive analytics is to understand what has happened in the past, most of the time in the context of specific business questions or problems. It can be used to identify patterns, trends, and anomalies and outliers in data that can help organizations make better decisions.

## 4. Explain Predictive analytics?

Predictive analytics is the second type of 3 main analytics . It is used to understand what might happen in the future. Predictive analytics involves the use of data, statistical models, and machine learning techniques to make predictions about future

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events or outcomes. The goal of predictive analytics is to understand what might happen in the future, and to use that understanding to make better decisions. Predictive analytics can be used to identify potential risks and opportunities, and to make more accurate forecasts.

5. Explain perspective analytics?

Prescriptive analytics is 3rd type of Analytics that involves the use of data, mathematical modelling, and optimization techniques to identify the best course of action to achieve a desired outcome. The goal of prescriptive analytics is to understand what should be done to achieve the desired outcome, and to use that understanding to make better decisions. Prescriptive analytics can be used to identify the most efficient and effective course of action, and to make real-time decisions.

6. Write five real-life questions that PowerBi can solve.

- **The sales of products** in the market over the past year. Power BI can connect to sales data and provide visualizations such as bar charts and line charts that show sales over time, helping to identify trends and patterns in the Indian market.
  - **The growth of customer base** in the market over the past few years. Power BI can connect to customer data and provide visualizations such as area charts and bubble charts that show customer growth over time.
  - **The Comparison of product's competitors** in terms of price and market share in the market. Power BI can connect to pricing and market share data and provide visualizations such as bar charts and scatter plots that show how our products compare to our competitors in the Indian market.
  - **The performance of marketing campaigns over the past year.** Power BI can connect to website and social media data, and provide visualizations such as line charts and heat maps that show how marketing campaigns have performed in terms of website traffic and engagement.
  - **The distribution of products.** Power BI can connect to distribution data and provide visualizations such as maps and bubble charts that show how the distribution of products has changed over time, and help identify potential areas for improvement.
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