**Power BI Assignment 1**

1. What do you mean by BI? Explain

Business intelligence systems combine data gathering, data storage, and knowledge management with data analysis to evaluate and transform complex data into meaningful, actionable information, which can be used to support more effective strategic, tactical, and operational insights and decision-making.

Business intelligence environments consist of a variety of technologies, applications, processes, strategies, products, and technical architectures used to enable the collection, analysis, presentation, and dissemination of internal and external business information.

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

Power BI is a business intelligence platform that provides nontechnical business users with tools for aggregating, analysing, visualizing and sharing data.

Power BI can help connect disparate data sets, transform and clean the data into a data model and create charts or graphs to provide visuals of the data. All of this can be shared with other Power BI users within the organization. This makes easy for organisation to take decision or analysis.

1. Explain Descriptive analytics?

Descriptive analytics is a commonly used form of data analysis whereby historical data is collected, organised and then presented in a way that is easily understood. Descriptive analytics is focused only on what has already happened in a business and, unlike other methods of analysis, it is not used to draw inferences or predictions from its findings. Descriptive analytics is, rather, a foundational starting point used to inform or prepare data for further analysis down the line.

Descriptive analytics uses simple maths and statistical tools, such as arithmetic, averages and per cent changes, rather than the complex calculations necessary for predictive and prescriptive analytics. Visual tools such as line graphs and pie and bar charts are used to present findings, meaning descriptive analytics can – and should – be easily understood by a wide business audience.

1. Explain Predictive analytics?

Predictive analytics, as its name implies, is focused on predicting and understanding what could happen in the future. Analysing past data patterns and trends by looking at historical data and customer insights can predict what might happen going forward and, in doing so, inform many aspects of a business, including setting realistic goals, effective planning, managing performance expectations and avoiding risks.

1. Explain perspective analytics?

If descriptive analytics tells you what has happened and predictive analytics tells you what could happen, then prescriptive analytics tells you what should be done. This methodology is the third, final and most advanced stage in the business analysis process and the one that calls businesses to action, helping executives, managers and operational employees make the best possible decisions based on the data available to them.

Prescriptive analytics takes what has been learned through descriptive and predictive analysis and goes a step further by recommending the best possible courses of action for a business. This is the most complex stage of the business analytics process, requiring much more specialised analytics knowledge to perform, and for this reason it is rarely used in day-to-day business operations.

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

* Customer Churn Analysis.
* Product Sales Data Analysis.
* Marketing Campaign Insights Analysis.
* Financial Performance Analysis.
* Healthcare Sales Analysis.