**Power BI Assignment 1**

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

Business intelligence (BI) is a procedural and technical infrastructure that collects, stores, and analyses the data produced by a company’s activities.

BI is a broad term that encompasses data mining, process analysis, performance benchmarking and descriptive analytics. It parses all the data generated by a business and presents easy-to-digest reports, performance measures, and trends that inform and help management to take good decisions.

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

* BI helps in collecting, modifying, and analysing company data.
* BI parses data and produces reports and information that help managers to make better decisions.
* BI helps in more accurate reporting and analysis, improved data quality, better employee satisfaction, reduced costs, and increased revenues, and the ability to make better business decisions.
* Self-service BI is an approach to analytics that allows individuals without a technical background to access and explore data.

1. **Explain Descriptive analytics?**
   * + Descriptive analytics is the process of parsing historical data to better understand the changes that have occurred in a business.
     + Using a range of historic data and benchmarking, decision-makers obtain a holistic view of performance and trends on which to base business strategy.
     + In its simplest form, descriptive analytics answers the question, "What happened?”
     + Examples of metrics used in descriptive analytics include year-over-year pricing changes, month-over-month sales growth, the number of users, or the total revenue per subscriber.
2. **Explain Predictive analytics?**

* Predictive Analytics is a branch of advanced analytics that makes predictions about future outcomes using historical data combined with statistical modelling, data mining techniques and machine learning.
* Predictive analytics are used to determine customer responses or purchases, as well as promote cross-sell opportunities. Predictive models help businesses attract, retain and grow their most profitable customers. Improving operations. Many companies use predictive models to forecast inventory and manage resources.

1. **Explain perspective analytics?**

* Prescriptive analytics is the third and final phase of Business Analytics, which also includes descriptive and Predictive analytics.
* Prescriptive analytics not only anticipates what will happen and when it will happen, but also why it will happen. Further, prescriptive analytics suggests decision options on how to take advantage of a future opportunity or mitigate a future risk and shows the implication of each decision option.
* Prescriptive analytics can continually take in new data to re-predict and re-prescribe, thus automatically improving prediction accuracy and prescribing better decision options
* Prescriptive, which answers the question, “What should we do next?”

1. **Write five real-life questions that Power BI can solve.**

### Website Analytics Reports (This report can help to find following thngs)

* User Hits and Bounce Rate by the Country
* A device that is being used to access the website
* How many times the user visits the website
* How much time on average the users are spending on your website

### Sales Analysis Report (This report can help to find some trends in sales of company by different zones of countries.)

### Email Marketing Reports (This report can help to find following things)

* Emails Engagement numbers.
* Email Delivery Rate.
* Bounce Rate (The % of people who saw it for the first time and didn’t respond back).
* Email Open Rate.
* Email Opened vs Email Clicked comparison.

### Customer Profitability Reports (This report can help to find following things)

* The company’s gross margin.
* Number of Customers it has; 60.
* It shows the selling of 3 Different Products.
* Lowest & highest revenues in different months.
* Locations or regions from where the highest revenue is being generated.

### Financial Analysis Reports (This report can help to find following things)

* Total Revenue
* Total Expenses
* Liabilities
* Assets
* Gross Margin
* Cash Available in the Company
* Comparison between Expense and Revenue.
* Liabilities vs Assets Comparison