**Power BI Assignment 1**

1. What do you mean by BI? Explain.
2. How Power-BI helps in BI, and how does it help Analysts? Explain.
3. Explain Descriptive analytics?
4. Explain Predictive analytics?
5. Explain perspective analytics?
6. Write five real-life questions that PowerBi can solve.

**Answers**

1. BI stands for Business Intelligence. It comprises the strategies and technologies used by enterprises for the data analysis and management of business information. Common functions of business intelligence technologies include reporting, online analytical processing, analytics, dashboard development, data mining, process mining, complex event processing, business performance management, benchmarking, text mining, predictive analytics, and prescriptive analytics.
2. Power BI helps Analyst in publishing Reports/Dashboards to a workspace/stakeholder community that they can interact with reports to see their performace analysis or any other information. Data visualization becomes more easier and interactive in just few clicks, drag and drops.
3. **Descriptive Analytics** helps an organization to know what has happened in the past, it provides us the past analytics using the data that are stored. For a company, it is necessary to know the past events that help them to make decisions based on the statistics using historical data. For example – **sales performance**.  
   Process involved – **Data aggregation** and **Data Mining.**   
   Approach – **Reactive Approach**
4. **Predictive Analytics** makes predictions about future outcomes using historical data combined with statistical modeling, data mining techniques and machine learning. Companies employ predictive analytics to find patterns in this data to identify risks and opportunities. Predictive analytics is often associated with big data and data science. For example – **Sentimental analysis, credit score analysis**, etc.  
   Process involved – **Statistics** and **forecasting** techniques.  
   Approach – **Proactive Approach**
5. **Perspective Analytics** help businesses make better decisions through the analysis of raw data. Prescriptive analytics specifically factors information about possible situations or scenarios, available resources, past performance, and current performance, and suggests a course of action or strategy. It can be **used to make decisions on any time horizon, from immediate to long-term**. It is the opposite of descriptive analytics, which examines decisions and outcomes after the fact.  
   Prescriptive analytics isn't foolproof, as it's only as effective as its inputs.
6. Power BI can help in – Sales evaluation, Educational performance evalution, Patient recovery, loans, crime rate monitoring.