410255:LP-VI BI	
Experiment No: 4	Import the data warehouse data in Microsoft Excel and create the Pivot table and Pivot Chart.

Objective of the Assignment : To introduce the concepts and components of Business Intelligence (BI)

Prerequisite:
        1. Basics of Google Sheets.
        2. Concept of Table, Chart.

Contents for Theory :
    1) What is a Data Warehouse?
    What is Pivot Table and Pivot Chart ?
    2) Steps for Creating a Pivot Table in Google Sheets.
    Steps for Creating a Pivot Chart in Google Sheets.

1. What is a Data Warehouse?
A data warehouse is a centralized repository of integrated and transformed data from multiple sources within an organization. It is designed to support business intelligence (BI) activities, such as data analysis, reporting, and decision-making.

2. What is Pivot Table and Pivot Chart ?
A pivot table is a powerful tool in spreadsheet software (such as Google Sheets or Microsoft Excel) that allows you to summarize and analyze large datasets by grouping and summarizing data in different ways. Pivot tables allow you to quickly create tables that show a summary of data based on specific criteria or dimensions. For example, you can use a pivot table to summarize sales data by region or by product category.

A pivot chart is a graphical representation of the data in a pivot table. Pivot charts allow you to visualize the summarized data in a way that is easy to understand and interpret. They can be created based on the data in a pivot table, and can be customized in a variety of ways to better represent the data being analyzed. Pivot charts are especially useful when dealing with large amounts of data, as they can help identify patterns and trends that might not be immediately obvious from the raw data.

3. Steps for Creating a Pivot Table in Google Sheets.
1) Open a Google Sheets document with the data you want to use for the pivot table.
2) Select the range of data you want to use for the pivot table.
3) Click on the "Data" tab in the top menu, then click on "Pivot table."
4) In the "Create Pivot Table" dialog box, select the range of data you want to use for the pivot table and choose where you want to place the pivot table (in a new sheet or in the

same sheet).

5) Click on "Create."
6) In the pivot table editor, drag and drop the columns you want to use for thepivot table into the "Rows," "Columns," and "Values" sections.
7) To add a filter to the pivot table, drag a column into the "Filter" section.
8) To customize the values in the pivot table, click on the drop-down menu inthe "Values" section and choose the type of calculation you want to use (such as sum, count, or average).
9) Customize any additional options in the pivot table editor (such as sortingand formatting).
10) Click on "Update" to apply the changes and create the pivot table.

4. Steps for Creating a Pivot Chart in Google Sheets.

1. Open a Google Sheets document with the data you want to use for the pivotchart.
2. Select the range of data you want to use for the pivot chart.
3. Click on the "Data" tab in the top menu, then click on "Pivot table."
4. In the "Create Pivot Table" dialog box, select the range of data you want to use for the pivot table and choose where you want to place the pivot table (ina new sheet or in the same sheet).
5. Click on "Create."
6. In the pivot table editor, drag and drop the columns you want to use for thepivot chart into the "Rows" and "Values" sections.
7. Click on the "Chart" tab in the pivot table editor.
8. Choose the type of chart you want to use for the pivot chart from thedrop-down menu.
9. Customize the chart options (such as chart title, axis labels, and colors) toyour liking.
10. Click on "Update" to apply the changes and create the pivot chart.

Conclusion : In this way we pivot table and pivot chart using Googlespreadsheets | Excel .

Assignment Questions :
1. Define Data Warehouse.
2. Define Pivot Table | Pivot Chart.
3. Draw a FlowChart for creating a pivot table in google sheets .

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