1. What is Power Pivot components and what are its tasks.

Ans: Power Pivot is an advanced data modelling component used in Excel and Power BI to:

* Import and process large datasets from various sources.
* Create relationships between tables.
* Write calculated columns and measures using DAX (Data Analysis Expressions).
* Build semantic models to support interactive reporting.

Key Components:

* Data Model: The structure of tables, relationships, and calculations.
* Diagram View: Visual layout for managing table relationships.
* Calculation Area: Where DAX measures and calculated fields are defined.
* Field List/Pane: Lets you drag and drop fields into visuals.

1. What are the different views in Power BI desktop. Explain each which it’s working.

Ans:

|  |  |  |
| --- | --- | --- |
| **Report View** | The canvas where you create visualizations. | Drag fields to build charts, graphs, slicers, etc. |
| **Data View** | Shows the data in each table in a tabular form. | You can inspect, sort, and format columns here. |
| **Model View** | Displays relationships between tables. | Use this to define relationships, cardinality, and cross-filtering. |

1. What are star and snowflake schema with diagrammatical explanation.

Ans: **Star Schema**

* One central **fact table** linked to multiple **dimension tables**.
* Simplified queries and high performance; ideal for reporting.

Date

|

Product — Fact Table — Customer

|

Store

**Snowflake Schema**

* Dimension tables are **normalized**, meaning they are split into related sub-tables.
* Reduces data redundancy but can make queries more complex.

Product — Product Subcategory — Product Category

|

Date — Fact Table — Customer — Address — City — Country

|

Store — Store Type

1. What is dimension and fact table.

Ans: **Fact Table**:

* Stores **measurable, quantitative data**.
* Examples: Sales, Profit, Revenue, Quantity.
* Contains foreign keys to dimension tables.

**Dimension Table**:

* Stores **descriptive, categorical data**.
* Examples: Customer Name, Product Type, Region.
* Provides context to facts.