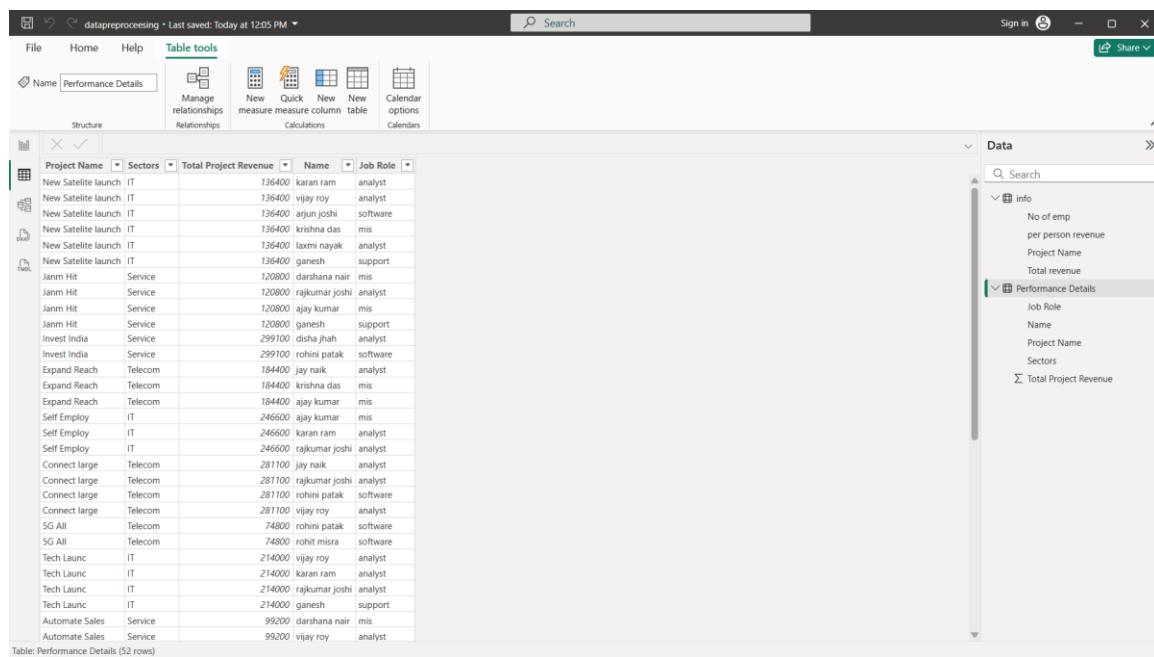


Power BI Assignment

This assignment focuses on data preprocessing and transformation in Power BI. The dataset contains details about different projects, their sectors, total project revenue, employee names, and job roles. The goal was to clean and prepare the data using Power BI's Power Query Editor and Data View for analysis and visualization.

1. Performance Details Table

The 'Performance Details' table contains project-level data such as Project Name, Sector, Total Project Revenue, Employee Name, and Job Role. This dataset serves as the foundation for analyzing project revenues and employee contributions across departments.



The screenshot shows the Power BI Data View interface with the 'Performance Details' table selected. The table has columns: Project Name, Sectors, Total Project Revenue, Name, and Job Role. The data includes various projects like 'New Satellite launch', 'Jann Hit', and 'Invest India' across sectors like IT and Service, with total revenues ranging from 136400 to 299100. The Power BI ribbon at the top shows 'Table tools' selected. The Data pane on the right shows the structure of the table, including columns for Job Role, Name, Project Name, Sectors, and Total Project Revenue.

Project Name	Sectors	Total Project Revenue	Name	Job Role
New Satellite launch	IT	136400	karan ram	analyst
New Satellite launch	IT	136400	vijay roy	analyst
New Satellite launch	IT	136400	argun joshi	software
New Satellite launch	IT	136400	krishna das	mis
New Satellite launch	IT	136400	laxmi nayak	analyst
New Satellite launch	IT	136400	ganesh	support
Jann Hit	Service	120800	darshana nair	mis
Jann Hit	Service	120800	rajkumar joshi	analyst
Jann Hit	Service	120800	ajay kumar	mis
Jann Hit	Service	120800	ganesh	support
Invest India	Service	299100	disha jhan	analyst
Invest India	Service	299100	rohini patak	software
Expand Reach	Telecom	184400	jay naik	analyst
Expand Reach	Telecom	184400	krishna das	mis
Expand Reach	Telecom	184400	ajay kumar	mis
Self Employ	IT	246600	ajay kumar	mis
Self Employ	IT	246600	karan ram	analyst
Self Employ	IT	246600	rajkumar joshi	analyst
Connect large	Telecom	281100	jay naik	analyst
Connect large	Telecom	281100	rajkumar joshi	analyst
Connect large	Telecom	281100	rohini patak	software
Connect large	Telecom	281100	vijay roy	analyst
SG All	Telecom	74800	rohini patak	software
SG All	Telecom	74800	rohit misra	software
Tech Launc	IT	214000	vijay roy	analyst
Tech Launc	IT	214000	karan ram	analyst
Tech Launc	IT	214000	rajkumar joshi	analyst
Tech Launc	IT	214000	ganesh	support
Automate Sales	Service	99200	darshana nair	mis
Automate Sales	Service	99200	vijay roy	analyst

2. Info Table

The 'info' table summarizes key metrics such as total revenue, number of employees, and per-person revenue for each project. It was derived from the 'Performance Details' table using data transformation techniques like grouping and aggregation in Power BI.

The screenshot shows the Microsoft Power Query Editor interface. The top navigation bar includes 'File', 'Home', 'Help', and 'Table tools'. The 'Table tools' ribbon has tabs for 'Structure' and 'Relationships'. Under 'Structure', there are icons for 'Manage relationships', 'New measure', 'Quick measure', 'New column', 'New table', and 'Calendars'. The main area displays a table with 16 rows and 4 columns: 'Project Name', 'Total revenue', 'No of emp', and 'per person revenue'. The data includes various project names like 'New Satellite launch', 'Jann Hit', 'Invest India', etc., with their respective revenue and employee counts. To the right, a 'Data' pane shows the schema with columns: 'info' (selected), 'No of emp', 'per person revenue', 'Project Name', 'Total revenue', and 'Performance Details' (expanded) which includes 'Job Role', 'Name', 'Project Name', 'Sectors', and 'Total Project Revenue'. The status bar at the bottom indicates 'Table: info (16 rows)'.

3. Data Cleaning and Transformation (Transform Data View)

In the Transform Data (Power Query Editor) window, several preprocessing steps were applied to ensure the dataset was clean, consistent, and ready for analysis. The 'Applied Steps' pane shows all the transformations performed sequentially. Below is a summary of each step:

- **Changed Type:** Ensured each column had the correct data type (e.g., text for names and sectors, numeric for revenue).
- **Renamed Columns:** Adjusted column names for clarity and consistency.
- **Filtered Rows:** Removed unwanted or duplicate rows from the dataset to maintain data integrity.
- **Trimmed Text:** Removed any leading or trailing spaces from text fields like Project Name, Name, and Job Role.
- **Lowercased Text:** Converted all text data to lowercase to standardize the formatting and avoid inconsistencies.
- **Replaced Values:** Replaced specific incorrect or inconsistent values (e.g., typos or alternate spellings).
- **Split Column by Delimiter:** Separated combined column values into individual columns, if necessary.
- **Merged Queries:** Joined the 'Performance Details' table with the 'info' table to combine relevant information for analysis.

The screenshot shows the Microsoft Power Query Editor interface. The main area displays a table titled "Table.SelectRows(#"Lowercased Text1", each true)". The table contains 52 rows of data, with the first few rows shown below:

	Project Name	Sectors	Name	Job Role	Total Project Revenue
1	New Satellite launch	IT	karan ram	analyst	136400
2	New Satellite launch	IT	vijay roy	analyst	136400
3	New Satellite launch	IT	arjun joshi	software	136400
4	New Satellite launch	IT	krishna das	mis	136400
5	New Satellite launch	IT	laxmi nayak	analyst	136400
6	New Satellite launch	IT	ganesh	support	136400
7	Jamm Hit	Service	darshana nair	mis	120800
8	Jamm Hit	Service	rajkumar joshi	analyst	120800
9	Jamm Hit	Service	ajay kumar	mis	120800
10	Jamm Hit	Service	ganesh	support	120800
11	Invest India	Service	disha jhah	analyst	299100
12	Invest India	Service	rohini patak	software	299100
13	Expand Reach	Telecom	jay naik	analyst	184400
14	Expand Reach	Telecom	krishna das	mis	184400
15	Expand Reach	Telecom	ajay kumar	mis	184400
16	Self Employ	IT	ajay kumar	mis	246600
17	Self Employ	IT	karan ram	analyst	246600
18	Self Employ	IT	rajkumar joshi	analyst	246600
19	Connect large	Telecom	jay naik	analyst	281100
20	Connect large	Telecom	rajkumar joshi	analyst	281100
21	Connect large	Telecom	rohini patak	software	281100
22	Connect large	Telecom	vijay roy	analyst	281100
23	All All	Telecom	rohini nataik	software	74891

The bottom of the editor shows a preview of the data and a note: "PREVIEW DOWNLOADED AT 11:14". The "Applied Steps" pane on the right lists the following steps:

- Split Column by Delimiter1
- Changed Type2
- Renamed Columns
- Filtered Rows
- Lowercased Text
- Trimmed Text
- Filtered Rows1
- Replaced Value1
- Replaced Value2
- Replaced Value3
- Filtered Rows2
- Replaced Value4
- Replaced Value5
- Filtered Rows3
- Lowercased Text1
- Filtered Rows4

4. Summary

Through these preprocessing steps, the data was transformed into a structured and clean format. This enabled accurate calculations of project-level insights like total revenue per project, employee distribution across sectors, and per-person revenue contribution. These clean datasets ('Performance Details' and 'info') are now ready for visualization in Power BI.