



SHORT-TERMINTERNSHIP



**Dr. LANKAPALLI BULLAYYA COLLEGE
VISAKHAPATNAM**

Contents

- 1: EXECUTIVE SUMMARY**
- 2: OVERVIEW OF THE ORGANIZATION**
- 3: INTERNSHIP PART**
- 4: ACTIVITY LOG FOR THE EIGHT WEEKS**
- 5: WEEKLY REPORTS**
- 6: OUTCOMES DESCRIPTION**
- 7: *Student Self Evaluation of the Short-Term Internship***
- 8: *Evaluation by the Supervisor of the Intern Organization***
- 9: PHOTOS & VIDEO LINKS**
- 10: ASSESSMENT STATEMENT**

Acknowledgements

I would sincerely like to thank Apsche for providing me with this short-term immersion internship which helped me gain practical experience and knowledge on Data Analytics.

I thank our respected Principal Sir Dr. G.S.K Chakravarthy for giving me this wonderful opportunity.

I would also like to thank our Head of the Department Mr. A.K Mahesh, Department of BBSC, Miss Hymavathi mam, and our guide Dr. J.L P.K. Mudula Pavaneenam

for being a wonderful mentor throughout my project.

I thank Almighty/god, my parents and my friends without whose help this project would not have been completed.

CHAPTER 1 : Executive Summary

Description of the sector of business (s) intern organization.

Smart bridge operates in the data analytics sector, providing innovative solutions to enhance business intelligence. The organization leverages Power BI cognos Analytics to empower clients with actionable insights, enabling data - driven decision - making.

Learning objectives and outcomes :

- 1) Masters of Power BI cognos Analytics
- 2) Data cleansing
- 3) Data processing (s) manipulation
- 4) statistical Analysis
- 5) Mastery of Python programming
- 6) Web Designing

Summary of Internship Activities :

- 1) Attending live training sessions and project .
Mentoring sessions
- 2) Selection of topic -ii student performance Analysis " and gathering, clearing and Analyzing its related data sets in Excel
- 3) Team formation and Assignment of tasks to team members
- 4) Designing & Developing interactive Dashboards, stories, report on project using Power BI cognos Analytics and web integration
- 5) Drafting a project video Demonstration and Preparation of final report

CHAPTER 2: OVERVIEW OF THE ORGANIGATION

Smart Bridge is a platform that offers virtual Internship to the student. The platform's goal is to prepare students for the job market by establishing a co-operative relationship b/w industry & Academia. Smart Bridge partners with companies such as Google to offer virtual internships. The internships provide students with hands-on experience with the latest technologies, and enable project-based learning. Smart Bridge's flagship event is the "Summer Internship program". The program develops student skills in emerging technologies i.e 1) Artificial Intelligence 2) Machine Learning 3) Internet of things.

Organization's objective:

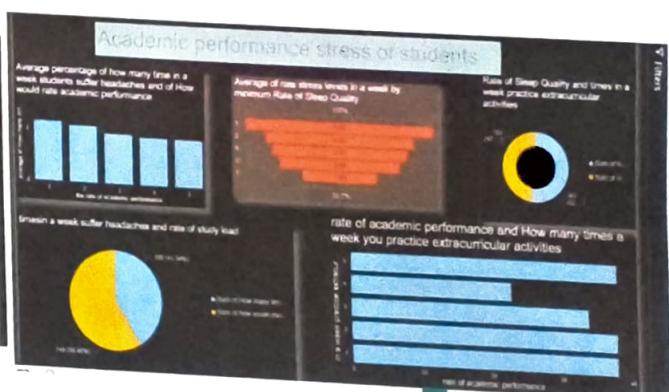
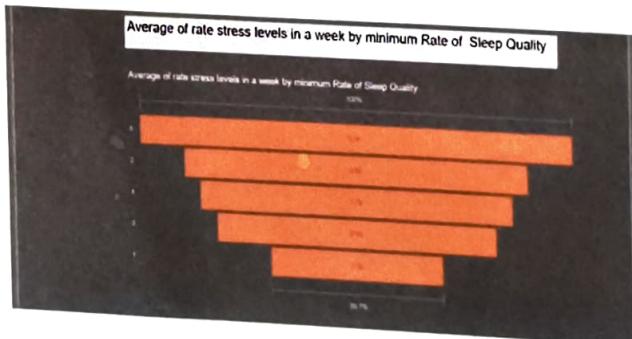
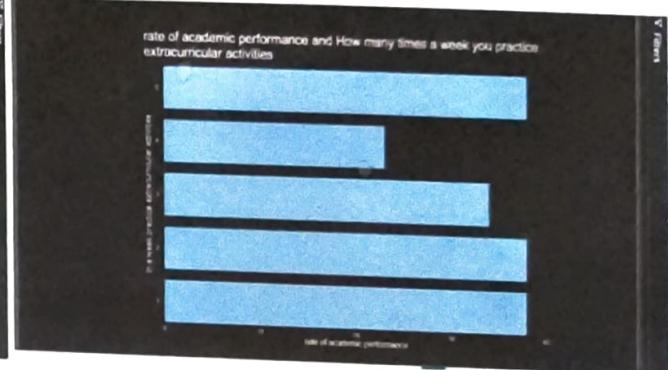
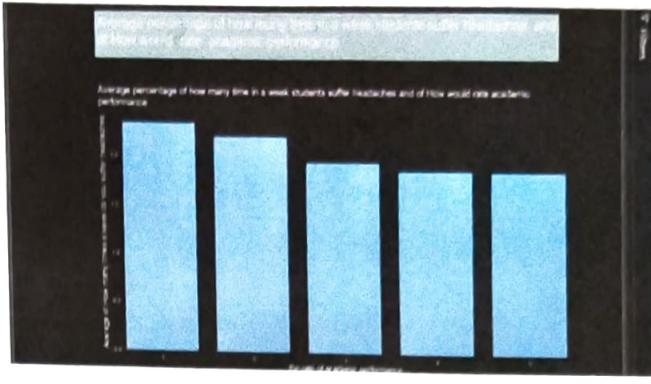
Smart Bridge's main objective is to bridge the existing gaps between prevailing Industry standards and what the academics offer to the graduates while passing out of university. Smart Bridge offers suitable skill development programs to the young talent before they start their first job. These skill development programs are designed considering the present demand skill in the industries we thereby work along the line to offer

Best programs that helps the students to gain practical knowledge and hands on training to learn skills of the future. Therefore, the main objectives of Smartbridge is Providing Internship for every students, Promote Industries approved professional electives, & Become a talent factors of India by 2006.

CHAPTER 3: INTERNSHIP PART

Description of the Activities / Responsibilities undertaken

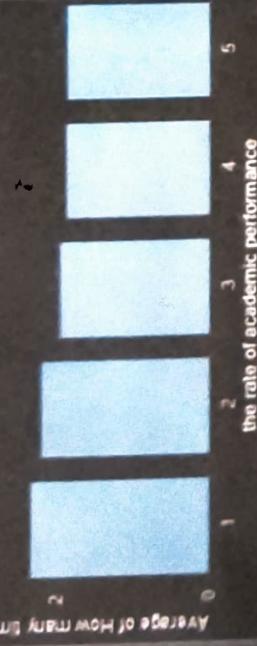
- 1) Registering with APSche smartinternz & enrolling for smartbridge's Data analytics course i.e live training sessions as per the pre-scheduled training calendar.
- 2) Participating weekly Quiz & completing weekly Assignments with respect to Data Analytics.
- 3) Team formation & selection of Project topic "Student Performance Analytics".
- 4) Gathering, cleaning & Analyzing the excel data sets of the project topic - "A Student Performance Analysis."
- 5) Attending project - mentoring sessions and designing and developing interactive Dash board, Story, Report on the project topic using Power BI cognos Analytics.
- 6) Web Integration of above project deliverables with team's webpage using visual studio code, drafting a project video demonstration and preparation of final report.
- 7) Submission of team project via uploading the project files in GitHub responsibility of the team.



Academic performance stress of students

Filters

Average percentage of how many time in a week students suffer headaches and of How would rate academic performance



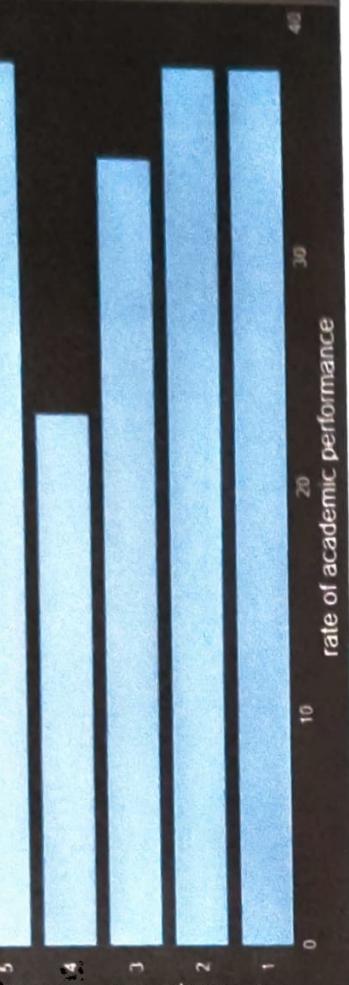
Average of rate stress levels in a week by minimum Rate of Sleep Quality



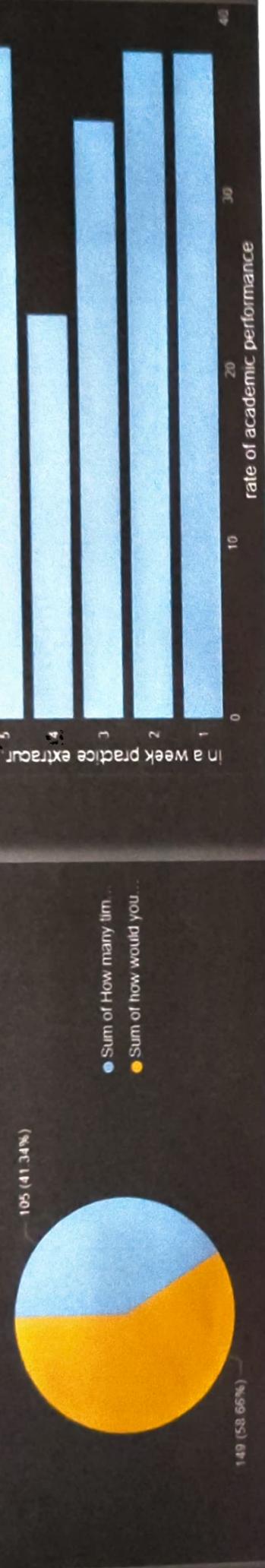
Rate of Sleep Quality and times in a week practice extracurricular activities



times in a week suffer headaches and rate of study load



Sum of How many times in a week practice extracurricular activities



PHOTOS & VIDEO LINKS

Page No

WEEKLY REPORT

WEEK - 1 (From Dt. 3 / 7 / 24 to Dt. 5 / 7 / 24.....)

Power BI

Objective of the Activity Done: Introduction to Data Analytics and

Detailed Report: In the first week, we were introduced to the fundamentals of data analytics, emphasizing the role of data-driven decision-making in modern businesses. The sessions covered the basis of data analysis, different types of data, and the importance of data visualization.

We also explored Power BI, understanding its interface, features, and how it integrates with other Microsoft products.

The week concluded with a hands-on session on loading and transforming data in Power BI.

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Monday Day -1 8-7-24	Introduction of data Analytics	Analysis of the topic	
Tuesday Day -2 9-7-24	Introduction of data Analytics	Analysis of the topic	
wednesday Day -3	Agenda and understanding costumes	clear view of business problem and solutions.	
thursday Day -4	Analysis and implementing data	Putting the data in visual form	
friday Day -5	Data Analytics application	Learn about different tools and insights	
saturday Day -6	Researched the additional information online	additional information about DA	

WEEKLY REPORT

WEEK - 2 (From Dt. 8/7/24 to Dt. 12/7/24.....)

Objective of the Activity Done: Data transformation and Modeling

Detailed Report: The second week focused on data transformation and modeling within Power BI.

We learned to clean, reshape, and prepare data using Power Query Editor. The training covered essential functions like filtering, merging, and appending datasets.

Additionally, we were introduced to data modeling concepts such as relationships, cardinality, and data hierarchies.

The data practical sessions helped reinforce these concepts by allowing us to create and manage data models effectively.

ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
monday Day -1	Data Analytics application	learned about different tools and insights	
Tuesday Day -2	Data Analytics application	where it is used in diff sec	
wednesday Day -3	Data Analytics process and steps in DA	Learned about data clearing and processing	
Thursday Day -4	Data Analytics process and steps in DA	Learned about data clearing and processing	
Friday Day -5	Types of data Analytics	Different types in DA in clear way	
Saturday Day -6	Revision on given topics	Revised about DA	

WEEKLY REPORT

WEEK - 3 (From Dt.15/7/24 to Dt.19/7/24.....)

Objective of the Activity Done: Data visualization Techniques

Detailed Report: In the third week, the emphasis was on data visualization techniques using power BI.

We explored various types of charts, graphs, and maps that can be created in power BI to visualize data insights.

The sessions included best practices for selecting the right visualizations based on the type of data and the message we want to convey. We also learned about customizing visual elements, using themes, and enhancing reports with interactive features like slices and drill-throughs.

ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Monday Day -1	business problems and the solutions (Proutise)	challenges faced in organization	
Tuesday Day -2	Business problems and the solutions (Proutise)	challenges faced in organization	
Wednesday Day -3	Power BI in Action	visible insights & sales for cost	
Thursday Day -4	BI Architecture	learned about structure	
Friday Day -5	BI Architecture	learned about structure	
Saturday Day -6	Revision on given topics	Revised about DA	

WEEKLY REPORT

WEEK - 4 (From Dt. 22/7/24 to Dt. 26/7/24.....)

Objective of the Activity Done:

Advanced Analytics and DAX

Detailed Report:

Week four delved into advanced analytics and Data Analysis Expression (DAX) in power BI.

We learned how to create calculate-d columns, measures, and custom tables using DAX. The training covered complex DAX functions such as time intelligence filtering and aggregation.

We also explored advanced analytical techniques like trend analysis, forecasting, and what if scenarios.

The week ended with exercises to build dynamic reports using DAX-driven insights.

ACTIVITY LOG FOR THE FORTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Monday Day -1	Data to insights flow in power BI	learned about data and model view	
Tuesday Day -2	Tables and merges	learned about the kinds in merge	
wednesday Day -3	ETL tools in tables and power query merges	whilize power learned about BI data flows in the kinds in merge	
thursday Day -4	ETL tools in power query	whilize power BI data flows	
Friday Day -5	ETL tools in power query	whilize power BI data flows	
saturday Day -6	Researched the additional information online	additional information about BI	

WEEKLY REPORT

WEEK - 5 (From Dt 29/7/24 to Dt 2/8/24.....)

Objective of the Activity Done: Power BI service and collaboration

Detailed Report: The fifth week covered the Power BI service and its collaborations features.

We learned how to publish reports to the Power BI service, share dashboards and collaborate with team members in real time. The sessions emphasized data security, row-level security (RLS), and managing workspaces.

We also explored Power BI's integrations with other Microsoft tools like Excel, Teams, and SharePoint, making it easier to collaborate and share insights across the organization.

ACTIVITY LOG FOR THE FIFTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
monday Day -1	data sources dash boards and insights	learned how these are used in BI	
TUESDAY Day -2	data collection and data cleaning	learned about the process in DA	
Wednesday Day -3	data collection and data cleaning	learned about the process in DA	
Thursday Day -4	data Analytics expressions (DAX)	learned about the expression and functions	
Friday Day -5	data Analytics expressions (DAX)	learned about the expression and functions	
Saturday Day -6	discussion regarding Project	discussed about Project	

WEEKLY REPORT

WEEK - 6 (From Dt. 5/8/24 to Dt. 9/8/24.....)

Objective of the Activity Done: Best practices and Industry applic-
ations

Detailed Report: In the final week of internship classes, we focused on best practices in data analytics and real world applications of Power BI across various industries.

We discussed key strategies for optimizing data models, enhancing report performance, and maintaining data governance.

The sessions also included case studies showcasing how companies use Power BI for business intelligence, sales analysis, financial reporting and operational efficiency. The week wrapped up with an overview of the upcoming project work.

ACTIVITY LOG FOR THE SIXTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
monday Day -1	filtered functions in DAX	different filters in DAX	
Tuesday Day -2	filtered functions in DAX	different filters in DAX	
wednesday Day -3	preparations for grand assessment test	Preparation for assessment test	
thursday Day -4	Preparation for grand assessment test	Preparation for assessment test	
friday Day -5	grand assessment test	gave the grand assessment test	
saturday Day -6	researched the additional information online	additional information about BI	

WEEKLY REPORT

WEEK - 7 (From Dt.12.18.24 to Dt..16.9.24.....)

Objective of the Activity Done: Project work data Analysis and visualizations

Detailed Report: The seventh week marked the beginning of the project phase

Our Project name was Academic Performance stress of students

The Project involved analyzing a data set provided by Smart intenz and transforming the data and remove the nulls in the data and next load into the Power BI.

In Power BI we have to create a some graphs, bar charts and pie charts and also creating the dashboards in the Power BI

ACTIVITY LOG FOR THE SEVENTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	Team Allotment	Selection of team leads and team members	
Day -2	Mentor Allotment	Assigning mentors to each team	
Day -3	Team project topic Selection and Division of team project tasks.	Divide the project tasks into a systematic project outflow / layout	
Day -4	collecting the Data	collect the data from Kaggle website	
Day -5	create a visualization in the given data	create the visualization like graphs, bar graph and pie chart etc.	
Day -6	create the dashboard	create dashboard in the power BI	

WEEKLY REPORT

WEEK - 8 (From Dt 19/8/24 to Dt. 23/8/24.....)

Objective of the Activity Done: Finalization and presentation

Detailed Report: In the final week, we completed the project by defining our reports and dashboards, ensuring they met the project requirements.

And our team sign up into the GitHub and upload the dashboard and reports and creating video demo about the project this are uploading in the Github.

The Project was well received marking a successfull conclusion to be the internship

ACTIVITY LOG FOR THE EIGHT WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	Creating the report about the project	Create in report in Power BI	
Day -2	Video Demonstration of Project	Create video Demonstration on Project	
Day -3	Project report writing	Drafting the final report	
Day -4	Project report writing	Drafting the final report	
Day -5	Register the Github for upload of the data	Upload the dashboard and reports in the Github	
Day -6	Project Report Finalization and submission	Conclusion and submission of final report	

CHAPTER 6: OUTCOMES DESCRIPTION

Describe the work environment you have experienced (in terms of people interactions, facilities available and maintenance, clarity of job roles, protocols, procedures, processes, discipline, time management, harmonious relationships, socialization, mutual support and teamwork, motivation, space and ventilation, etc.)

Description of work Environment:

The internship at smartbridge has been a transformative experience, equipping me with practical skills in data analytics and a deep understanding of Power BI.

The hands-on experience & exposure to real-world projects has not only sharpened my technical abilities but also improved my communication skills and project management skills. The work environment fosters a collaborative atmosphere with clear task-division, well-defined protocols & structured processes. The facilities are equipped with necessary tools for data analysis team members exhibited mutual support & teamwork, contributing to a harmonious relationship. Overall, the internship provided a well-organized, competitive environment in data analysis and supportive work environment.

Describe the real time technical skills you have acquired (in terms of the job-related skills and hands on experience)

Description of technical skills acquired

- * Data Analysis: Proficiency in examining and interpreting complex data sets.
- * Statistical analysis: Understanding and applying statistical methods to derive insights.
- * Data visualization: Mastery in creating compelling visualizations for effective communication of data.
- * Programming Language: Knowledge & expertise in programming language.
- * Visualization generation: Skills in developing interactive dashboards, comprehensive reports in Power BI.
- * Data Transformation: Transforming data using Power Query, which involves data cleaning, mapping, appending.
- * Performance optimization: Improving the performance of reports by optimizing data models, reducing data set size and managing relationships.
- * Error handling: Diagnosing and fixing issues related to data refresh, query errors and visual inconsistencies.

Describe the managerial skills you have acquired (in terms of planning, leadership, team work, behaviour, workmanship, productive use of time, weekly improvement in competencies, goal setting, decision making, performance analysis, etc.

Description of managerial skills acquired:

- * Project management: coordinating tasks, setting goals & ensuring the timely completion of the data analytics project.
- * Team collaboration: Work effectively in a group setting, delegating tasks & fostering a collaborative environment.
- * Leadership skills: taking initiative, guiding the team, and making decisions to achieve project objectives.
- * Time management: prioritizing tasks, meeting deadlines & efficiently allocating resources.
- * Problem solving as a team: Addressing challenges collectively & finding solutions through group discussions & collaboration.
- * Adaptability: Being flexible & adapting to change in project scope or requirements.
- * Quality Assurance: Ensuring the accuracy & quality of quality of the data analytics project deliverables produced by the team.

Describe how you could improve your communication skills (in terms of improvement in oral communication, written communication, conversational abilities, confidence levels while communicating, anxiety management, understanding others, getting understood by others, extempore speech, ability to articulate the key points, closing the conversation, maintaining niceties and protocols, greeting, thanking and appreciating others, etc.)

Description of the communication skills acquired:

- * Technical communication: Effectively conveying complex data analytics concepts & findings.
- * presentation skills: creating & delivering engaging presentations to communicate insights. dashboard, visualization & project.
- * Team collaboration: collaborating with team members to share information, discuss project progress & update.
- * Written communication: crafting clear & concise reports documentation and emails related to data analytics process.
- * Conflict resolution: Addressing & resolving conflicts with the team to maintain a positive & productive environment between team members.
- * Feed back delivery: providing constructive feedback back to mentors, and trainees and receiving feedback.
∴ fostering a culture of continuous improvement.

Describe how could you could enhance your abilities in group discussions, participation in teams, contribution as a team member, leading a team/activity.

Reflecting on my experience in data analytics at Smart bridge intern. The identified key areas for enhancing my abilities in group discussions, team participation and leadership.

To improve my contributions in group discussions, I aim to actively listen to others ask insightful questions and share my opinions, perspectives clearly & effectively. As a team leader I plan to strengthen collaboration by proactively offering support, leveraging my technical skills and embracing different viewpoints to team members.

Lastly to enhance my leadership capabilities I plan to focus on taking initiative, creating a positive team environment and effectively coordinating team activities through the measures I am committed to continuous growth and excellence in role within the team.

Describe the technological developments you have observed and relevant to the subject area of training (focus on digital technologies relevant to your job role)

Description of digital technologies of Power BI.

- 1) Data connectivity : Power BI connects to a variety of data sources, including data bases, cloud services and web APIs. This technology allows live connection to data sources, enabling real time data analysis without importing data into Power BI.
- 2) Data transformation and modeling : Power Query editor enables users to clean, transform and shape data through a user-friendly interface. Power BI provides capabilities for creating relationships b/w different data tables calculated columns using DAX.
- 3) Data visualization : Users can create interactive dashboards with a wide range of visualizations such as charts graphs tables these can be customized and tailored to specific needs.
- 4) Natural Language Processing (NLP) : A feature enables users to ask questions about their data using natural language and Power BI will generate visualizations based on the queries. This helps users interact with data in a more intuitive way.