Research Activity: Exploring Power BI

Subject: Computer Programming / Data Analytics

Topic: Introduction to Power BI

Objective:

By the end of this activity, students will:

- Understand what Power BI is and its basic functions.
- Identify its key features and use cases.
- Compare Power BI with Microsoft Excel in terms of data analysis capabilities.

Instructions:

1. Research Phase

Using online resources (e.g., official Microsoft site, blogs, YouTube tutorials, or articles), research **Power BI**. Take notes and answer the guide questions below.

2. Answer the Guide Questions

Write your answers clearly and concisely on a short bond paper or in a Word document.

3. Comparison Task

In the latter part of your paper, compare **Power BI** with **Microsoft Excel** based on the criteria provided.

Q Guide Questions:

- 1. What is Power BI?
- 2. Who developed Power BI and what is its main purpose?
- 3. What are the main components of Power BI (e.g., Power BI Desktop, Service, Mobile)?
- 4. What are some key features of Power BI?
- 5. What types of **data sources** can Power BI connect to?
- 6. How does Power BI help in data visualization and business decision-making?
- 7. What are **Dashboards** and **Reports** in Power BI?
- 8. Can Power BI be used for **real-time data analysis**? How?
- 9. What are some **industries or professions** that benefit from using Power BI?
- 10. Is Power BI free to use? If not, what are its pricing options?

⚠ Comparison: Excel vs. Power BI

Create a simple table comparing **Excel** and **Power BI** based on the following:

Criteria	Microsoft Excel	Power BI
Purpose		
Ease of Use		
Data Visualization Tools		
Real-time Capabilities		
Data Size Handling		
Automation and Updates		
Collaboration & Sharing		
Best Used For		

After the table, write a short paragraph (3-5 sentences) summarizing **which tool is more suitable for data analysis** and **why**.