

README FILE

Brainwave Matrix Solution Task 1: Data Science Intern

Brainwave Matrix Internship – Sales Data Analysis Project

This repository contains the solution for Task 1 of the Brainwave Matrix Internship Program. The project involves analyzing the sales data of a fictional retail company, Future Mart, using Python and Jupyter Notebook.

NOTE : After downloading the dataset and the ipynb file, keep it in the desired folder and then copy the path. Open the iynb file in jupyter notebook environment, paste the path copied from your desired location in the pd.readExcel section and use double '/' for minimizing the error.

* Project Description

The objective is to perform a comprehensive sales analysis on data from a commercial store. The dataset includes sales transactions, product details, customer information, and store locations. The analysis provides insights into:

- Total sales, discounts, and revenue
- Monthly sales trends
- Top-selling products
- Store-wise performance
- Payment method distribution
- Category-wise revenue

The project demonstrates data cleaning, aggregation, and visualization techniques using standard Python libraries.

*** Dataset Details**

The dataset is provided in an Excel file with the following sheets:

- `Sales Data`
- `Product Master`
- `Customer Master`
- `Store Master`

All data is hypothetical and generated for demonstration purposes.

*** Technologies Used**

- Python (Jupyter Notebook)
- Pandas
- Matplotlib
- Seaborn
- JupyterLab or Jupyter Notebook environment

*** How to Run the Project**

1. Clone the repository to your local system:

```
git clone https://github.com/your-username/Brainwave_Matrix_Intern.git
```