**Idea: Exploratory Data Analysis (EDA) on Retail Sales Data**

**Description:**

In this project, you will work with a dataset containing information about retail sales. The goal is  
to perform exploratory data analysis (EDA) to uncover patterns, trends, and insights that can  
help the retail business make informed decisions.

**Dataset 1** [**Link**](https://www.kaggle.com/datasets?search=retail+sales)

**Dataset 2** [**Link**](https://www.kaggle.com/datasets/mcdonalds/nutrition-facts)

**Key Concepts and Challenges:**

1. Data Loading and Cleaning: Load the retail sales dataset.
2. Descriptive Statistics: Calculate basic statistics (mean, median, mode, standard deviation).
3. Time Series Analysis: Analyze sales trends over time using time series techniques.
4. Customer and Product Analysis: Analyze customer demographics and purchasing behavior.
5. Visualization: Present insights through bar charts, line plots, and heatmaps.
6. Recommendations: Provide actionable recommendations based on the EDA.

**Learning Objectives:**

* Gain hands-on experience in data cleaning and exploratory data analysis.
* Develop skills in interpreting descriptive statistics and time series analysis.
* Learn to use data visualization for effective communication of insights.