Chocolate Sales

Problem: Unwrapping Insights from Chocolate Sales Data

What influences chocolate sales the most—price, brand, season, or something else entirely?

In this project, you'll explore the **Chocolate Sales Dataset**, which includes detailed information on chocolate products, pricing, sales quantities, and customer behavior. Your goal is to analyze sales trends, identify top-performing products, and generate data-driven strategies to boost future sales.

This is a business-focused project that blends market analysis with predictive modeling—perfect for practicing real-world retail analytics.

You'll work on tasks such as:

- **Data cleaning:** formatting dates, handling missing values, standardizing product categories

- **Exploratory data analysis (EDA):** uncovering patterns in sales by product type, brand, region, or time

- **Optional modeling:** forecasting sales or clustering customer/product profiles

- **Modeling:** Training a Regression Model

- **Evaluation:** Use R2 and RMSE

Skills you'll practice:

- Business analytics and product performance evaluation

- Predictive modeling or segmentation strategies

- Turning raw sales data into actionable business recommendations

If you've ever wondered how data drives decisions in retail or product marketing, this project gives you a sweet introduction.

Data:

The dataset `chocolate_sales.csv` has features related to chocolate sale translations

Client Information (Demographics & Socioeconomic)

- `Sales Person`:   Name of the salesperson Responsible
- `Product`:   Name of the chocolate product sold
- `Date`:   The transaction date of the chocolate
- `Amount`:   Total revenue generated from the sale
- `Boxes Shipped`:   Number of chocolate boxes shipped

Suggestions:

- Try using only a few sales people in your model, rather than attempt to create a dummy variable for all of them.
- Maybe look at the transactions on a monthly basis, rather than daily
- Create new features to improve predictability (seasonal indicators, price-per-unit, brand category, etc.