Project title: Answering Which commodity accounts for a major chunk of trade?

Propose and outcome:

Proposal 📈

The proposal is to establish an interactive Power BI Dashboard to analyze India's trade performance from 2010 to 2018. This will include:

* Overall Global Trade: Visualizing total exports, imports, and net trade, identifying top trading partners and dominant commodity groups.
* Bilateral Trade Deep Dive (Vietnam): Providing a focused analysis of India's trade specifically with Vietnam, including trends, balance, and key commodities exchanged between the two nations.

Outcome 💡

The expected outcomes from this dashboard are:

* Clear Understanding of Trade Balance: Stakeholders will gain a precise understanding of India's overall trade deficit/surplus and its year-over-year trends.
* Identification of Key Partners: Decision-makers will easily identify India's major global export and import partners, and pinpoint countries contributing most to trade surpluses or deficits.
* Commodity Insights: Clear insights into the primary goods and sectors driving both India's global and bilateral trade with Vietnam.
* Strategic Planning: The detailed bilateral analysis with Vietnam will inform specific strategies to either sustain and expand existing trade surpluses or address potential imbalances, enhancing the economic relationship between India and Vietnam.
* Actionable Recommendations: The data will empower the formulation of targeted recommendations for export promotion, import optimization, and trade policy adjustments both globally and with Vietnam.

Dataset:

Source: India - Trade Data

<https://www.kaggle.com/datasets/lakshyaag/india-trade-data/data?select=2010_2021_HS2_export.csv>

Description: The dataset consists of trade values for export and import of commodities in million USD. It contains information about HS code, commodity, value, country, year.

Structure:

* HS code: HS stands for Harmonized System. It was developed by the WCO (World Customs Organization) as a multipurpose international product nomenclature that describes the type of good that is shipped HS Code Structure.
* Commodity: the column contains chapter wise commodity category. In each commodity Category there are various commodities.
* Value: values for export and import of commodities in million USD.
* Country: countries imported/ exported.
* Year: that commodities imported/ exported between 2010 to 2021.

Method:

* Data Cleaning: Missing value, duplication, outliers, data format.
* Exploratory: Descriptive statistics, variable distribution, correlation between variables.
* Analysis & Modeling: Applying correlation, clustering, linear/ logistic regression etc.
* Visualization & Storytelling: Power PI/ Python Matplotlib.

Expected Outcome:

Answer some questions:

* Which commodites are imported and exported the most to Vietnam? Why?
* Which countries bring plus value to the balance of trade India? (Top 10).
* Which commodities are imported to India? Why?