Household Demographic Data Analysis

Project Overview
This project performs statistical analysis and visualization on a household demographic dataset using Python. The objective is to analyze income distribution, age trends, education impact, and household characteristics.

Dataset
File Name: Household_Demographic_Dataset.xlsx
Contains demographic data such as Age, Income, Education Level, Family Size, and Urban/Rural classification.

Technologies Used
Python, Pandas, NumPy, Matplotlib, Seaborn, SciPy

Analysis Performed
- Central Tendency (Mean, Median, Mode)
- Dispersion (Range, Variance, Standard Deviation, IQR)
- Skewness and Kurtosis

Visualizations
- Income Distribution Histogram
- Income by Education Level (Box Plot)
- Age vs Income (Scatter Plot)

How to Run
1. Install required libraries
2. Place the dataset in the project directory
3. Run the Python script

Output
Statistical summaries printed in console and visual graphs displayed.

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