■ Exploratory Data Analysis Report - Bank Customer Churn

Basic Exploration
 - Dataset has 10,000 rows and 12 columns.
 - Target column: churn (0 = no churn, 1 = churn).
 - No missing values detected.
 - Around 20% of customers churned

Observations:
1. Age: Older customers (40+) show higher churn rates.
2. Balance: Customers with high balances are more likely to churn.
3. Country: Germany has noticeably higher churn compared to France & Spain.
4. Gender: Churn distribution is similar across genders.
5. Credit Card & Active Member: Customers with credit cards or who are active churn less.
6. Products: Customers with 3+ products show unusual churn behaviour.
7. Correlation Heatmap: No strong correlations (all < 0.3).

Summary of Findings ~20% customers churned (imbalanced dataset). Older customers (40+) show higher churn. Germany has highest churn rate compared to France & Spain. Active members and credit card holders are less likely to churn. High-balance customers churn more often, indicating dissatisfaction. Weak linear correlations suggest possible non-linear patterns.