**STEP 1: Initial Table Review**

* **Understand all columns** in the marketing dataset.
* **Identify unclear column names** (e.g., AcceptedCmp1, MntWines) that need clarification.
* Use the **Marketing Data Dictionary** to:
  + Decode abbreviations (e.g., Mnt = Amount spent).
  + Understand column meanings (Kidhome, Teenhome, etc.).

**STEP 2: Categorize Column Types**

* Group columns into:
  1. **Customer Information** – e.g., Education, Marital Status, Income.
  2. **Spending Data** – e.g., Amount spent on Wine, Fruits, etc.
  3. **Purchasing Habits** – e.g., Website, Catalog, Store purchases.
  4. **Campaign Responses** – e.g., AcceptedCmp1 to AcceptedCmp6.

**STEP 3: Convert ‘Year\_Birth’ to ‘Age’**

1. Rename column from Year\_Birth to Age.
2. Add a prefix (1/1/) to each year (to create a full date).
3. Convert the column to **Date type**.
4. Use **Transform → Age** to calculate age.
5. Convert from **duration** to **years**.
6. Round to **whole numbers** (remove decimals).

**STEP 4: Clean Education Data**

* Identify and correct typos (e.g., 2n Cycle → Second Cycle).
* Replace incorrectly formatted values.

**STEP 5: Clean Marital Status**

* Identify invalid entries (e.g., YOLO, Absurd, Alone, Together).
* Make replacements:
  + Alone → Single
  + YOLO, Absurd, Together → Other
* Keep valid ones like Married, Divorced, Widow.

**STEP 6: Format Income Data**

* Change data type to **Fixed Decimal Number**.
* This helps with currency formatting and visualizations.

**STEP 7: Review Children/Teen Columns**

* Review Kidhome and Teenhome.
* Confirm values range (e.g., 0–2).
* Understand what they represent.

**STEP 8: Review Customer Join Date**

* Analyze Dt\_Customer to determine data time span.
* Inferred range: 2012–2014.
* Leave as-is but note potential insights from it.

**STEP 9: Rename ‘Mnt’ Columns**

Rename the following:

* MntWines → Amount Wine Products
* MntFruits → Amount Fruit Products
* MntMeatProducts → Amount Meat Products
* MntFishProducts → Amount Fish Products
* MntSweetProducts → Amount Sweet Products
* MntGoldProds → Amount Baked Products

**STEP 10: Rename Purchase Columns**

Rename:

* NumDealsPurchases → Purchased Deal
* NumWebPurchases → Purchased Web
* NumCatalogPurchases → Purchased Catalog
* NumStorePurchases → Purchased Store
* NumWebVisitsMonth → Web Visits Last Month

**STEP 11: Rename Campaign Columns**

Rename:

* AcceptedCmp1 → Accepted Campaign 1
* AcceptedCmp2 → Accepted Campaign 2
* …
* Response → Accepted Campaign 6

**STEP 12: Final Columns Review**

* Complain → Leave as binary (1 = complaint in last 2 years, 0 = no).
* Country → Country of residence (values include US, India, Germany, etc.).

**STEP 13: Apply Transformations**

* Apply all steps through **Power Query Editor** in Power BI.
* Changes reflect in **Report View**.

**STEP 14: Visual Verification**

* Verify:
  + Corrected values (e.g., Second Cycle, Other).
  + Renamed columns.
  + Currency formatting for income.
  + Proper grouping of marital status.