**Excel Data Cleaning Project Notes**

**I. Data Import and Initial Cleaning**

1. **Sheet Creation**
   * Created Tabs: Working Sheet, Pivot Table, Dashboard.
   * Imported Data from Original to Working Sheet.
2. **Remove Duplicates**
   * Removed duplicate records based on the values in Column A.
3. **Find and Replace**
   * Utilized Ctrl+H (Find and Replace) for the following tasks:
     + Column B: Replaced "M" with "Married" and "S" with "Single."
     + Column C: Replaced "F" with "Female" and "M" with "Male" (using entire cell contents).
4. **Data Formatting**
   * Formatted Column D to display currency values without decimals.
5. **Age Bracket Classification**
   * Created a new column "Age Brackets."
   * Utilized an IF statement for age classification:
     + Example: In cell M2: **=IF(L2<31,"Adolescent","Invalid")**
     + Created nested IF statements for other age categories:
       - **=IF(L2>54,"Old",IF(L2>=31,"Middle Age",IF(L2<31,"Adolescent","Invalid")))**

**II. Pivot Table and Analysis**

1. **Pivot Table Preparation**
   * Selected all data from the Working Sheet using Ctrl+H.
2. **Pivot Table Creation**
   * Pivot 1: Rows - Income, Columns - Gender.
   * Pivot 2: Rows - Commute, Rows - Bike Purchase.
   * Pivot 3: Values - Count of Purchased Bike, Rows - Age Brackets.
3. **Pivot Chart Creation**
   * Created pivot charts for each pivot table.
4. **Dashboard**

**III. Dashboard Design**

1. **Dashboard Configuration**
   * Adjusted view settings (no gridlines).
   * Merged cells for headers and applied background color.
2. **Chart Integration**
   * Integrated pivot charts into the Dashboard tab.
3. **Slicer Integration**
   * Inserted slicers for filtering data by married/single status, region, and education.