A logo for a company

Description automatically generated

**Quality Control Form**

|  |  |
| --- | --- |
| **Team Name** | JOIN |
| **Team Members** | Egle, Aksha, James, Rachel |
| **Client Name** | Offuture |
| **Date of file received** | 2024-04-24 |
| **Name of file received** | 1 - Offuture 2011 - 2014 |
| **File Format received** | .csv |
| **Size of file (KB) received** | 12.1 MB |
| **Encoding of the file** | UTF-8 |
| **Recorded Number of Columns** | 24 |
| **Recorded Number of Rows** | 51290 |
| **Name of Schema of Destination Table** | student |
| **Name of Destination Table** | offuture |

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# **[SQL01] Count of Rows**

This table compares the number of rows in csv (source) and sql (target) files.

|  |  |  |
| --- | --- | --- |
| **Source** | **Target** | **Outcome** |
| 51290 | 51290 | PASS |

# **[SQL02] Count of Distinct Rows**

This table compares the number of unique rows in csv (source) and sql (target) files.

|  |  |  |
| --- | --- | --- |
| **Source** | **Target** | **Outcome** |
| 51290 | 51290 | PASS |

# **[SQL03] Count of Columns**

This table compares the number of columns in csv (source) and sql (target) files.

|  |  |  |
| --- | --- | --- |
| **Source** | **Target** | **Outcome** |
| 24 | 24 | PASS |

# **[SQL04] Sum of Column Sums**

This table compares the sum of numeric column sums in csv (source) and sql (target) files.

|  |  |  |
| --- | --- | --- |
| **Source** | **Target** | **Outcome** |
| 1331006116.61916 | 1331006116.61916 | PASS |

# **[SQL05] Sum of Row Sums**

This table compares the sum of numeric row sums in csv (source) and sql (target) files.

|  |  |  |
| --- | --- | --- |
| **Source** | **Target** | **Outcome** |
| 1331006116.61916 | 1331006116.61916 | PASS |

# **[SQL06] Sum, Min, Max Per Column**

This table compares the sum, lowest (min) and highest (max) entries in numeric columns in csv (source) and sql (target) files. Since it is not possible to find a sum of columns, which display date, they are marked as N/A.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Column name** | **Sum** | | **Min** | | **Max** | | **Outcome** |
| **Source** | **Target** | **Source** | **Target** | **Source** | **Target** |
| **Row ID** | 1315357695 | 1315357695 | 1 | 1 | 51290 | 51290 | PASS |
| **Order Date** | N/A | N/A | 01/01/2011 | 2011-01-01 | 31/12/2014 | 2014-12-31 | PASS |
| **Ship Date** | N/A | N/A | 03/01/2011 | 2011-01-03 | 07/01/2015 | 2015-01-07 | PASS |
| **Postal Code** | 551572652 | 551572652 | 1040 | 1040 | 99301 | 99301 | PASS |
| **Sales** | \*12642501.9098802 | 12642501.91 | 0.444 | 0.444 | 22638.48 | 22638.48 | PASS |
| **Quantity** | 178312 | 178312 | 1 | 1 | 14 | 14 | PASS |
| **Discount** | \*7329.72799999923 | 7329.728 | 0 | 0 | 0.85 | 0.85 | PASS |
| **Profit** | \*1467457.29127998 | 1467457.291 | -6599.978 | -6599.978 | 8399.976 | 8399.976 | PASS |
| **Shipping Cost** | 1352820.69 | 1352820.69 | 0 | 0 | 933.57 | 933.57 | PASS |

**Note:** \* The sums of Sales, Discount and Profit in the csv (source) file are more precise than in the sql (target) file. We speculate that it happens because the csv file has been opened with Excel, which supports a higher precision by default, compared to SQL interface – DBeaver.

# **[SQL07] Count of Distinct Entries Per Column**

This table compares the number of unique entries in each column in csv (source) and sql (target) files.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Source** | **Target** | **Outcome** |
| **Row ID** | 51290 | 51290 | PASS |
| **Order ID** | 25035 | 25035 | PASS |
| **Order Date** | 1430 | 1430 | PASS |
| **Ship Date** | 1464 | 1464 | PASS |
| **Ship Mode** | 4 | 4 | PASS |
| **Customer ID** | 1590 | 1590 | PASS |
| **Customer Name** | 795 | 795 | PASS |
| **Segment** | 3 | 3 | PASS |
| **City** | 3636 | 3636 | PASS |
| **State** | 1094 | 1094 | PASS |
| **Country** | 147 | 147 | PASS |
| **Postal Code** | 631 | 631 | PASS |
| **Market** | 7 | 7 | PASS |
| **Region** | 13 | 13 | PASS |
| **Product ID** | 10292 | 10292 | PASS |
| **Category** | 3 | 3 | PASS |
| **Sub-Category** | 17 | 17 | PASS |
| **Product Name** | 3788 | 3788 | PASS |
| **Sales** | 22995 | 22995 | PASS |
| **Quantity** | 14 | 14 | PASS |
| **Discount** | 27 | 27 | PASS |
| **Profit** | 24575 | 24575 | PASS |
| **Shipping Cost** | 10037 | 10037 | PASS |
| **Order Priority** | 4 | 4 | PASS |

# 

# **[SQL08] Count of Nulls**

This table compares the number of missing values in csv (source) and sql (target) files.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Source** | **Target** | **Outcome** |
| **Row ID** | 0 | 0 | PASS |
| **Order ID** | 0 | 0 | PASS |
| **Order Date** | 0 | 0 | PASS |
| **Ship Date** | 0 | 0 | PASS |
| **Ship Mode** | 0 | 0 | PASS |
| **Customer ID** | 0 | 0 | PASS |
| **Customer Name** | 0 | 0 | PASS |
| **Segment** | 0 | 0 | PASS |
| **City** | 0 | 0 | PASS |
| **State** | 0 | 0 | PASS |
| **Country** | 0 | 0 | PASS |
| **Postal Code** | 41296 | 41296 | PASS |
| **Market** | 0 | 0 | PASS |
| **Region** | 0 | 0 | PASS |
| **Product ID** | 0 | 0 | PASS |
| **Category** | 0 | 0 | PASS |
| **Sub-Category** | 0 | 0 | PASS |
| **Product Name** | 0 | 0 | PASS |
| **Sales** | 0 | 0 | PASS |
| **Quantity** | 0 | 0 | PASS |
| **Discount** | 0 | 0 | PASS |
| **Profit** | 0 | 0 | PASS |
| **Shipping Cost** | 0 | 0 | PASS |
| **Order Priority** | 0 | 0 | PASS |

# **[SQL09] Count of correct separator “-” locations and dashes**

This table compares the number of cases, wherethe separator “-“ locations have been placed correctly, according to the format of Order ID, Customer ID and Product ID entries, in (source) and sql (target) files. This quality check also compares the number of separators “-“ for each ID between (source) and sql (target) files.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column name** | **Number of correct separator “-” locations** | | **Number of separator “-“** | | **Outcome** |
| **Source** | **Target** | **Source** | **Target** |
| **Order ID** | 51290 | 51290 | 2 | 2 | PASS |
| **Customer ID** | 51290 | 51290 | 1 | 1 | PASS |
| **Product ID** | 51290 | 51290 | 2 | 2 | PASS |

# **[SQL10] Eyeball Check**

This table displays the row ID’ s of randomly selected rows, which were visually compared between csv (source) and sql (target) files.

|  |  |
| --- | --- |
| **Row ID** | **Outcome** |
| 23988 | PASS |
| 11407 | PASS |
| 4728 | PASS |
| 15850 | PASS |
| 46370 | PASS |

# **[SQL11] Count of Rows Where Order Date Is Before Or Equal To Ship Date**

This table compares the number of rows, where Order Date is before or equal to ship date in csv (source) and sql (target) files. This control check ensures that the date entries are logical and consistent.

|  |  |  |
| --- | --- | --- |
| **Source** | **Target** | **Outcome** |
| 51290 | 51290 | PASS |

# **[SQL12] Maximum precision (no. of decimal places)**

This table compares the maximumprecision of numeric (excluding date type) columns in csv (source) and sql (target) files. The values represent the number of decimal places.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Source** | **Target** | **Outcome** |
| **Row ID** | 0 | 0 | PASS |
| **Sales** | \*5 | \*5 | PASS |
| **Quantity** | 0 | 0 | PASS |
| **Discount** | 3 | 3 | PASS |
| **Profit** | \*5 | \*5 | PASS |
| **Ship Cost** | 2 | 2 | PASS |

**Note:** \* Sales and Profit entries have a higher precision than 2, which would be appropriate for monetary figures.

# **[Manual check] Date format Check**

This table compares the date format used for Order Date and Ship Date columns in csv (source) and sql (target) files.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Source** | **Target** | **Outcome** |
| **Order Date** | \*DD/MM/YYYY | \*D/M/YYYY | PASS |
| **Ship Date** | \*DD/MM/YYYY | \*D/M/YYYY |

**Note:** \* The day format in csv (source) file takes 2 places [DD], while in sql (target) file takes just one [D]. The difference lies in the data type used in the sql (target) file, where it has been assigned as variable character for the ease of import.

# **[SQL13] Duplicate Product ID check**

This table displays the duplicate Product ID’s and the number of Product Names for each ID.

|  |  |
| --- | --- |
| **Product ID** | **Number of Product Names** |
| OFF-PA-10001971 | 2 |
| OFF-EN-10001832 | 2 |
| OFF-SU-10004662 | 2 |
| OFF-AVE-10002102 | 2 |

# **General Notes**

* Sales and profit precision is higher than 2, which would be appropriate for monetary figures. We speculate this might have happened due to currency exchange.
* Sum check for columns Sales, Discount, and Profit show there are values, which have a decimal place of more than 2:
  + Sales – up to 4 decimal places
  + Discount – up to 8 decimal places
  + Profit – up to 3 decimal places
* Although the dataset includes information from collected from 2011 to 2014, shipping date goes after 2015.
* There are products, having inconsistent categories, for example, a product, which goes by name “Staples” has a lot of categories, whereas other staples have just one category.
* Some inconsistencies can be found within Markets. For example, Austria is included in both EU and EMEA markets and Mongolia belonging to both APAC and EMEA markets.
* Region column is inconsistent with its values and definition. We notice names of markets, continents or global directions as region values.