**Data Validation**

**1. Not Null Check**

* **Purpose**: Ensures that no null values exist in the specified column.
* **Applicable Data Types**: All data types.
* **Use**: Identifies records with null values in the specified column and flags them as errors.

**2. Non-Zero Check**

* **Purpose**: Ensures that no zero values exist in the specified column.
* **Applicable Data Types**: Number.
* **Use**: Identifies records with zero values in the specified column and flags them as errors.

**3. Length Check**

* **Purpose**: Ensures that the length of data in the specified column meets the criteria.
* **Applicable Data Types**: Varchar/Char.
* **Use**: Checks if the length is less than, greater than, or within a specified range, and flags non-conforming records as errors.

**4. Domain Check**

* **Purpose**: Ensures that data in the specified column matches a predefined set of values (LOVs).
* **Applicable Data Types**: All data types.
* **Use**: Flags records with values not in the specified list as errors.

**5. Format Check**

* **Purpose**: Ensures that data in the specified column matches a predefined format.
* **Applicable Data Types**: Date.
* **Use**: Flags records with values not matching the specified date format as errors.

**6. Range Check**

* **Purpose**: Ensures that data in the specified column falls within a specified range.
* **Applicable Data Types**: Number and Date.
* **Use**: Flags records with values outside the specified range as errors.

**7. Uniqueness Check**

* **Purpose**: Ensures that all values in the specified column(s) are unique.
* **Applicable Data Types**: All data types.
* **Use**: Flags duplicate records as errors.

**8. Number Check**

* **Purpose**: Ensures that data in the specified column contains only numeric values.
* **Applicable Data Types**: Varchar/Char.
* **Use**: Flags records with non-numeric values as errors.

**9. Pattern Check**

* **Purpose**: Ensures that data in the specified column matches a specified regular expression.
* **Applicable Data Types**: All data types.
* **Use**: Flags records that do not match the specified pattern as errors.

### 10. Data Availability Check

* **Purpose:** Ensures that data in a specified column is present and meets certain availability criteria.
* **Applicable Data Types:** All data types.
* **Use:** Flags records as errors if the data in the specified column is missing or does not meet the defined availability criteria (e.g., not null, mandatory fields).
* **Example:** Ensuring that every record in the 'Email Address' column is not empty.

**11. Comparison Check**

* **Purpose:** Compares data between two columns to ensure they meet a specified condition.
* **Applicable Data Types:** All data types.
* **Use:** Flags records as errors if the comparison condition (e.g., greater than, equal to) is not met.

**12. Conditional Uniqueness Check**

* **Purpose:** Ensures unique combinations of values in specified columns, potentially within defined grouping conditions.
* **Applicable Data Types:** All data types.
* **Use:** Flags records as errors if the combination of values in the specified columns is not unique within the defined group.

**Data Control**

* **Purpose** Ensures that the specified column contains expected values. This check is used when moving a table from one layer to another to ensure that no data is lost during the process.
* **Applicable Data Types**: All data types.
* **Use**: Flags records that do not contain the specified values in the column as errors.

**Referential Integrity**

* **Purpose**: Ensures that values in the specified column match values in a referenced table. It is an advanced version of a Domain Check where the values in a column are matched against the values in a referenced table. There might be cases where not all values are present in the table, but there cannot be any values outside of the reference table values.
* **Applicable Data Types**: All data types.
* **Use**: Flags records with values that do not exist in the referenced table as errors.

**Threshold**

1. **DATA CONFORMITY: -**

* **Purpose:** Data Conformity Check ensures that data conforms to predefined standards or rules. It flags records that fail to meet these standards.
* **Use**: This check defines object-level thresholds for critical and exception severity failures based on the count of failed records.
* For example, if the critical threshold is set at 0% and the critical and exception threshold is at 20%, any records exceeding these limits will be flagged as errors​

1. **VARIATION CHECK: -**

* **Purpose:** In the Variation check we count the restatement of the document in this we limit the change in restatement within the given threshold
* **Applicable Data Types**: All data types.
* **Use**: Flags records with values that vary beyond the acceptable threshold as errors.

1. **TREND CHECK: -**

* **Purpose: -** The Trend Check identifies percentage changes between consecutive time periods for a selected metric. It helps in understanding the trend over time.
* **Use: -**This check is useful in monitoring trends by identifying percentage changes between two consecutive time periods for a selected metric.
* Users select an aggregation function (e.g., sum, count distinct, standard deviation), a time dimension attribute, and define the lower and upper threshold limits for acceptable changes

1. **OVERLAP CHECK:**

* **Purpose: -** The Overlap Check compares data and identify record-level differences.
* **Use: -** This check is used to compare information in two tables, reporting the record-level differences.
* Users select attributes from both source and reference objects for comparison. This check ensures data consistency and identifies discrepancies between the tables​

**Custom Check**

**1. Custom Check**

* **Purpose**: Allows for user-defined validation logic to be applied to the specified column.
* **Applicable Data Types**: All data types.
* **Use**: Flags records that do not meet the custom-defined criteria as errors.