**Data Collection and Preprocessing Phase**

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| Date | 01 October 202 |
| Team ID | SWUID20250215169 |
| Project Title | Global Food Production Trends and Analysis:  A Comprehensive Study from 1961 to 2023 Using Power BI |
| Maximum Marks | 3 Marks |

**Data Quality Report Template**

The Data Quality Report Template will summarize data quality issues from the selected source, including severity levels and resolution plans. It will aid in systematically identifying and rectifying data discrepancies.

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| **Data Source** | **Data Quality Issue** | **Severity** | **Resolution Plan** |
| Food Production Dataset (1961–2023) From Kaggale | Missing production values for certain years and countries. | Moderate | Used Power Query to identify and remove null records; ensured remaining values were valid for trend analysis. |
| Food Production Dataset (1961–2023) From Kaggale | Duplicate entries for some countries and crops due to aggregation or repetition. | Low | Applied Remove Duplicates in Power Query on key columns (Entity, Crop, Year). |
| Food Production Dataset (1961–2023) From Kaggale | Crop columns were stored in wide format (one column per year), making analysis difficult. | High | Unpivoted year columns using Power Query to convert data into a long format suitable for Power BI time-series visuals. |
| Food Production Dataset (1961–2023) From Kaggale | Incorrect or mixed data types (text/numeric inconsistencies). | Low | Converted columns to correct types (Year → Whole Number, Production (tonnes) → Decimal Number). |
| Food Production Dataset (1961–2023) From Kaggale | Missing regional classification for some entities (countries vs. regions). | Moderate | Created a calculated column Entity Type using DAX to classify entries as Country or Region. |
| Food Production Dataset (1961–2023) From Kaggale | Extreme or unrealistic production values (outliers). | Low | Detected outliers using visual inspection in Power BI; verified FAO records; retained as genuine after cross-check. |