

The numbers you see in the results represent **ratios multiplied by 100 to avoid fractions** (equivalent to 10^2 in python – creating values as percentages of word occurrences per document), not actual count of words. These values provide a standardized way of interpreting frequency of related terms across documents and years.

In simple words, I use a single formula for all calculations: $r = \text{ROUND}\left(\frac{x}{y}, 2\right) \times 10^2$

- Let **x** be the count of related terms. (Specific terms from categories such as economic reforms, environmental policies, social policies, and gender-related issues defined in “helper.py”)
- Let **y** be the number of entries in a year. (Each entry represents a sentence from the findings and recommendations table)
- Let **r** be the trend term ratio for the year.

1. Calculating Trends in a Document:

- **Step 1:** For each document, the number of related terms is counted.
- **Step 2:** This count is then divided by the total number of entries in the document.
- **Result:** The result is the “**trends_in_document**” ratio, which indicates the frequency of related terms per entry within that document.

2. Calculating Trends in a Year:

- **Step 1:** For each year, the “**trends_in_document**” ratios are calculated for all documents within that year.
- **Step 2:** These ratios are then summed up for the entire year.
- **Step 3:** This sum is divided by the total number of documents for that year.
- **Result:** The resulting “**trends_in_year**” ratio provides a measure of how frequently related terms appeared across all documents in that year, normalized by the number of documents.

3. Creating the Time Series (TS) Graph:

- **X-Axis:** Represents the years.
- **Y-Axis:** Represents the “**trends_in_year**” ratios.

4. Creating the Bar Chart:

- **Step 1:** The “**trends_in_document**” ratio is calculated for each document as described earlier.
- **Step 2:** These ratios are summed across all documents and divided by the total number of documents.
- **Result:** The value plotted on the x-axis of the bar chart represents the sum of average frequency of related terms across all documents.