

Project Title: *Survey Feedback Analyzer*

Problem Statement:

In any data-driven domain, especially in Data Science, analyzing textual feedback is a critical step for extracting insights, improving services, and understanding user sentiment. This project aims to help you apply core Python programming concepts to build a **text-based feedback analysis tool**. You will work with survey feedback entries stored in a dictionary of lists, perform basic data cleaning, extract meaningful insights, and apply logic using loops, conditionals, string operations, and user-defined functions.

Project Steps and Objectives:



Step 1: Preloaded Feedbacks (Given Data) (1 mark)

Start your program with the following dictionary of lists, preloaded with 10 feedbacks:

```
feedback_data = {
    'S_No': [1, 2, 3, 4, 5, 6, 7, 8, 9, 10],
    'Name': ['Ravi', 'Meera', 'Sam', 'Anu', 'Raj', 'Divya', 'Arjun', 'Kiran', 'Leela', 'Nisha'],
    'Feedback': [
        'Very GOOD Service!!!',
        'poor support, not happy ',
        'GREAT experience! will come again.',
        'okay okay...',
        'not BAD',
        'Excellent care, excellent staff!',
        'good food and good ambience!',
        'Poor response and poor handling of issue',
        'Satisfied. But could be better.',
        'Good support... quick service.'
    ],
    'Rating': [5, 2, 5, 3, 2, 5, 4, 1, 3, 4]
}
```



Step 2: Add More Feedbacks (4 marks)

- Ask the user to enter how many more feedbacks they want to add.
- For each feedback, collect the following inputs from the user:
 - **Name**
 - **Written Feedback (text)**
 - **Rating (1–5)**

- Automatically increment `S_No` starting from 11 onward.
 - Append all new data into the `feedback_data` dictionary.
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Step 3: Text Cleaning (4 marks)

Clean all feedback entries as follows:

- Remove punctuation (`.`, `,`, `!`, `?`)
- Replace multiple spaces with a **single space**
- Remove leading and trailing spaces
- Convert all text to **lowercase**

 *Tip: Use `.replace()`, `.split()` and `' '.join()` creatively.*

Step 4: Word Count Insights (4 marks)

Create a function `count_word_in_feedbacks(word)` that:

- Takes a word as input.
- Returns how many feedbacks **contain that word** (case-insensitive match).

Use this function to print:

- Number of feedbacks containing `"good"`
 - Number of feedbacks containing `"poor"`
 - Number of feedbacks containing `"excellent"`
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Step 5: Final Summary & Insights (12 marks)

- Display the final cleaned `feedback_data` (dictionary of lists).
- Print the **average rating** from all feedbacks.
- Find and display the feedback with the **longest comment** (in terms of word count).
- Print the **list of unique words** used across all feedbacks (avoid duplicates).

 *(Optional): Sort feedbacks by **rating (highest to lowest)** using `zip()` and `sorted()`. Display the sorted entries.*
