Coding Test for Software Development Intern Position at First Review:

Objective: You will create a program that automatically formats text by applying specific style rules. The program should process the provided text snippets and output the corrected text under a "Corrected:" header, with no additional explanations or notes. You'll implement two style rules and test them with the provided excerpt. The input and output document will be docx i.e Microsoft word file.

Submission:

- Submit your code (Python).
- Submit a short README explaining how to run it and your approach.
- Submit a corrected output of the excerpt provided below.
- Do not use the python-docx library.
    - Hint-{use library pwin32}
- Input in docx i.e. Microsoft Word and Output also in docx.
- Fix using Hardcoding, do not use local LLM or LLM API's for the given tasks.

Deadline: [14 April 2025, 21:00 IST]

Task 1: Language & Spelling

Description: Apply UK spelling and replace specific terms. Do not change proper nouns or content inside quotes.

Test Cases:

1. **Basic Replacement**
    - **Input**:
      We organize a meeting eg next week.
    - **Expected Output**:
      Corrected:
      We organise a meeting for example next week.
    - **Why**: "organize" changes to "organise" for UK spelling, and "eg" is replaced with "for example."
2. **Proper Noun Exception**
    - **Input**:
      World Health Organization uses eg to explain policies.

- ○ **Expected Output**:
    Corrected:
    World Health Organization uses for example to explain policies.
  - ○ **Why**: "organize" in the proper noun "World Health Organization" remains unchanged, but "eg" is replaced with "for example."

3. **Quoted Content Exception**
   - ○ **Input**:
     She said, "We organize eg on Monday."
   - ○ **Expected Output**:
     Corrected:
     She said, "We organize eg on Monday."
   - ○ **Why**: No changes are made inside quotation marks, so "organize" and "eg" remain as-is.

Task 2: Names and Acronyms

Description: Use the full name with title on the first mention, then the title and last name for subsequent mentions. If two people share the same last name, use full names to avoid confusion. Include periods in initials (e.g., "Franklin D. Roosevelt").

Test Cases:

1. **First and Subsequent Mention**
   - ○ **Input**:
     Dr Manmohan Singh spoke. Dr Manmohan Singh left.
   - ○ **Expected Output**:
     Corrected:
     Dr Manmohan Singh spoke. Dr Singh left.
   - ○ **Why**: The first mention uses the full name "Dr Manmohan Singh," while the second uses the shortened form "Dr Singh."

2. **Ambiguity Between Names**
   - ○ **Input**:
     Nawaz Sharif spoke. Shehbaz Sharif replied.
   - ○ **Expected Output**:
     Corrected:
     Nawaz Sharif spoke. Shehbaz Sharif replied.
   - ○ **Why**: Both individuals share the last name "Sharif," so full names are used to avoid ambiguity.

3. **Initials in Names**
   - ○ **Input**:
     Franklin D Roosevelt visited.

○ **Expected Output**:
 Corrected:
 Franklin D. Roosevelt visited.
○ **Why**: Periods are added to the initials in "Franklin D Roosevelt" to form "Franklin D. Roosevelt."

Article: A Conference on Global Policy Challenges

On Monday, we organize a significant conference eg in London, hosted by the World Health Organization. The event aims to address pressing global policy issues, and Dr Manmohan Singh will deliver the opening remarks. Dr Manmohan Singh has been a key figure in economic policy, and he plans to stay for the entire three-day event. He mentioned, "We organize eg our sessions to maximize engagement," emphasizing the importance of structured discussions, etc.

The conference features several notable speakers, including Nawaz Sharif, who will speak on trade policies. Later in the day, Shehbaz Sharif takes the stage to discuss healthcare reforms, creating some confusion among attendees due to their shared last name. Nawaz Sharif focuses on tariffs, while Shehbaz Sharif highlights the need for universal healthcare access. "It's crucial to organize eg partnerships," Shehbaz Sharif told the audience, sharing his vision for collaborative efforts.

Another speaker, Franklin D Roosevelt, joins the event as a policy historian. He often references the legacy of Franklin D Roosevelt, the former U.S. president, in his talks, which might puzzle some attendees unfamiliar with the distinction. Franklin D Roosevelt, the historian, prefers to be called "Dr Roosevelt" in formal settings, but the conference program lists him as "franklin d roosevelt." He plans to discuss historical policy impacts, eg during the Great Depression.

Dr Aishwarya Rai, a renowned public health expert, also participates in the conference. Dr Aishwarya Rai has collaborated extensively with the World Health Organization on vaccination campaigns, and she frequently uses terms like "eg" in her presentations. During a panel, she stated, "We organize eg our data to ensure clarity." Her session draws a large crowd, eager to hear her insights on global health strategies, etc.

The event includes a breakout session led by Dr Singh, who reflects on his time as an economic advisor. Dr Manmohan Singh often cites historical examples to support his arguments, making his session highly engaging. He references the World Health Organization's role in past health crises, noting their efforts to organize eg international responses. Attendees appreciate his depth of knowledge and practical approach.

Midway through the conference, Nawaz Sharif and Shehbaz Sharif host a joint Q&A session. The Sharif brothers address questions on economic collaboration, with Nawaz Sharif focusing on trade agreements and Shehbaz Sharif emphasizing healthcare funding. Their shared last name continues to cause minor mix-ups, as some attendees mistakenly attribute comments to the wrong speaker. "We must organize eg better communication," Nawaz Sharif remarked, addressing the confusion.

Dr Roosevelt, the historian, presents a detailed analysis of Franklin D Roosevelt's New Deal policies. He contrasts the former president's strategies with modern approaches, using terms like "etc" to summarize lists of reforms. Franklin D Roosevelt, the historian, also shares a quote from a 1930s speech: "We must organize eg for progress." His presentation highlights the relevance of historical lessons in today's policy landscape.

In a later session, Dr Rai returns to the stage to discuss her recent work with the World Health Organization. Dr Aishwarya Rai emphasizes the importance of data-driven decision-making, often using shorthand like "eg" in her slides. She mentions, "We organize eg our teams to tackle outbreaks," illustrating her approach to crisis management. Her talk inspires many attendees to consider public health careers.

The conference concludes with a closing address by Dr Singh, who summarizes the key takeaways. Dr Manmohan Singh praises the contributions of all speakers, including Nawaz Sharif and Shehbaz Sharif, for their insightful discussions. He also acknowledges Franklin D Roosevelt for his historical perspective, noting how it enriched the event. Dr Singh's speech leaves the audience motivated to apply the lessons learned, etc.

Reflecting on the event, Dr Rai shares her final thoughts with the press. Dr Aishwarya Rai highlights the collaborative spirit of the conference, crediting the World Health Organization for its role in bringing experts together. She concludes, "We organize eg these events to foster innovation," underscoring the value of such gatherings. The conference ends on a high note, with attendees eager for next year's edition.