Question (Q): Please first introduce your role, then talk about the victim of the case you are aware of: what kind of person is Boss Yang, and what is your relationship with him. Finally, provide a detailed description of your timeline on the day of the incident. Be specific about who you met and what you did at what time on the day of the incident.

Question decomposition:
Q -> [q1, q2, ... qn]

Input question

Generate initial answer

Initial Answer: Hello everyone, I am Boatman Wang. In this case, the victim I know, Boss Yang, is a bar owner. He seems to be involved in some shady business... On the timeline of the day of the incident, I was working on the boat in the afternoon with other crew members. In the evening, after having dinner with my daughter-in-law Dr. Ling, I returned to my room. I spent the evening at home and didn't see anyone else. Around 2 a.m., I heard some noises but did not go out to check, as I was unaware of what had happened. Throughout the day of the incident, my activities were quite mundane and unremarkable.

Retrieve relevant facts from script

Retrieve relevant information from memory

Memory **Chat History (H):**

Please introduce your role first...

I am Secretary Wen. As ....

Hello, Secretary Wen. From your ...

Hello, Secretary Wen. According..

Secretary Wen, did you notice the ...

Script (S):

Name: Boatman Wang
Age: 49
......
【June 19, 2222】19:30 - Boatman Wang was preparing to meet Boss Yang when suddenly ...

【June 19, 2222】19:40 - Boatman Wang arrived at Boss Yang's room, told the bodyguard that ...

【June 19, 2222】20:00 - During the conversation with Boss Yang, Boatman Wang told him that ...
......

Relevant memory

Relevant facts

Relevant facts

LLM

Input initial answer

Verify refined answer with relevant facts

If no, regenerate answer

If yes, output answer

Refine initial answer

Input refined answer

Refined Answer (A): Hello everyone, I am Boatman Wang. In this case, the victim I know, Boss Yang, is a bar owner. ... I arrived at Boss Yang's room at about 19:40, told the bodyguard that I was Boss Yang's business partner, and the bodyguard let me in to wait for Boss Yang. Around 20:00, during the conversation with Boss Yang, I told him that Dr. Ling was my daughter-in-law and offered to help her repay the debt. I requested Boss Yang not to commit murder. Boss Yang laughed, saying he had no intention of killing her and did not ask for the money to be repaid. I...

Answer decomposition:
A -> [a1, a2, ..., an]
a1: Boatman Wang worked on the boat in the afternoon, alongside other crew members.
a2: At about 19:40, Boatman Wang arrived at Boss Yang's room and told the bodyguard
....
an: Around 2 a.m., Boatman Wang heard some noises but did not go out to investigate, as he was unaware of what had happened.

Retrieve relevant facts based on decomposed answers

Overall framework

Data flow of memory retrieval and initial answer generation.

Data flow of Self-Refinement process.

Data flow of Self-Verification process.