```
 1 C:\Users\91790\PycharmProjects\TaskBlueEnigma\venv\
   Scripts\python.exe C:\Users\91790\PycharmProjects\
   TaskBlueEnigma\hybrid_chat.py
 2 Hybrid travel assistant (Advanced). Type 'exit' to
   quit.
 3
 4 Enter your travel question: create a romantic 4 day
   itinerary for Vietnam
 5 DEBUG: Embedding cache miss. Computing new embedding.
 6 DEBUG: Pinecone returned 5 results.
 7 DEBUG: Graph returned 15 facts asynchronously.
 8 DEBUG: Summarizing retrieved context...
 9 DEBUG: Generated Summary -> Based on the search
   results and graph facts, here's a concise summary of
   the key entities and their relationships relevant to
   the user's query:
10
11 **Key Entities:**
12
13 1. **Hanoi**: A city in Vietnam.
14 2. **Da Lat**: A city in Vietnam (not explicitly
   related to the user's query, but mentioned in the
   search results).
15 3. **Hanoi Attraction 1-13**: Various attractions
   located in Hanoi.
16
17 **Relationships:**
18
19 1. **Hanoi** is connected to **Hue** and **Nha Trang
   ** by the relationship 'Connected_To'.
20 2. **Hanoi** is the location of **Hanoi Attraction 1-
   13** by the relationship 'Located_In'.
21
22 **Itinerary Suggestions:**
23
24 Given the information, a romantic 4-day itinerary for
    Vietnam could include:
25
26 Day 1: Explore Hanoi's attractions, such as Hanoi
   Attraction 1-13, and enjoy the city's romantic
   atmosphere.
```

27
28 Day 2: Visit Hue, a city connected to Hanoi, and experience its rich history and culture.

29
30 Day 3: Head to Da Lat, a city known for its natural beauty and romantic scenery.

31
32 Day 4: Relax in Nha Trang, another

33
34 === Assistant Answer ===

35
36 Reasoning Step-by-Step:

37
38 1. **Identify the primary location for the romantic 4-day itinerary**: Based on the user's query, the primary location should be Vietnam, but since the user didn't specify a particular city, I will choose Hanoi as the starting point due to its romantic atmosphere and the presence of various attractions.

39
40 2. **Select the most relevant attractions for the itinerary**: Given that Hanoi is the primary location, I will choose some of the most romantic attractions from Hanoi Attraction 1-13, such as the Temple of Literature, the Ho Chi Minh Mausoleum, and the Old Quarter.

41
42 3. **Choose a secondary location for the itinerary**: Since the user is looking for a romantic 4-day itinerary, I will select a city that is connected to Hanoi and offers a romantic atmosphere. Based on the relationships, I will choose Hue as the secondary location.

43
44 4. **Plan the itinerary**: Day 1 will be spent exploring Hanoi's attractions and enjoying the city's romantic atmosphere. Day 2 will be dedicated to visiting Hue and experiencing its rich history and culture. Day 3 will be spent in Da Lat, a city known for its natural beauty and romantic scenery. Day 4 will be relaxing in Nha Trang.

45
46 However, considering the information provided, Nha Trang is not explicitly related to the user's query. Therefore, I will replace Nha Trang with another city connected to Hanoi, which is [id:city_hue]'s neighboring city, but a more romantic destination would be [id:city_hanoi]'s neighboring city, which is [id:city_nha_trang] is not the best option, a better option would be [id:city_hoi_an] which is a romantic city in Vietnam.
47
48 5. **Finalize the itinerary**: The revised itinerary will be:
49 - Day 1: Explore Hanoi's attractions, such as the Temple of Literature, the Ho Chi Minh Mausoleum, and the Old Quarter.
50 - Day 2: Visit Hue and experience its rich history and culture.
51 - Day 3: Head to Da Lat and enjoy its natural beauty and romantic scenery.
52 - Day 4: Relax in Hoi An, a charming city with a romantic atmosphere.
53
54 Final Answer:
55
56 "Create a romantic 4-day itinerary for Vietnam:
57
58 Day 1: Explore Hanoi's attractions, such as the Temple of Literature, the Ho Chi Minh Mausoleum, and the Old Quarter.
59
60 Day 2: Visit Hue and experience its rich history and culture.
61
62 Day 3: Head to Da Lat and enjoy its natural beauty and romantic scenery.
63
64 Day 4: Relax in Hoi An, a charming city with a romantic atmosphere.
65
66 This itinerary will give you a chance to experience

```
66  the best of Vietnam's romantic cities and
    attractions, and create unforgettable memories with
    your loved one."
67
68  === End ===
69
70
71  Enter your travel question: Traceback (most recent
    call last):
72    File "C:\Users\91790\PycharmProjects\
    TaskBlueEnigma\hybrid_chat.py", line 193, in <module
    >
73      asyncio.run(interactive_chat_async())
74    File "C:\Users\91790\AppData\Local\Programs\Python
    \Python311\Lib\asyncio\runners.py", line 190, in run
75      return runner.run(main)
76             ^^^^^^^^^^^^^^^^
77    File "C:\Users\91790\AppData\Local\Programs\Python
    \Python311\Lib\asyncio\runners.py", line 118, in run
78      return self._loop.run_until_complete(task)
79             ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
80    File "C:\Users\91790\AppData\Local\Programs\Python
    \Python311\Lib\asyncio\base_events.py", line 653, in
     run_until_complete
81      return future.result()
82             ^^^^^^^^^^^^^^^
83    File "C:\Users\91790\PycharmProjects\
    TaskBlueEnigma\hybrid_chat.py", line 169, in
    interactive_chat_async
84      query = input("\nEnter your travel question: ").
    strip()
85             ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
86    File "<frozen codecs>", line 322, in decode
87  UnicodeDecodeError: 'utf-8' codec can't decode byte
    0xff in position 0: invalid start byte
88
89  Process finished with exit code 1
90
```