
This notebook is optimized for Google Colab. I prefer if you upload it to colab and run it.

However, to run this locally, be sure you:

- have python running locally, update the library install format from `!` to `%` so for example `!pip install foo` becomes `%pip install foo`
- store secrets as env variables in your local system using `os.environ.get("SECRET_NAME")` vs what I've currently implemented

✓ Libraries

> Ragas/DeepEval install

[Show code](#)

> Imports

[Show code](#)

> Env Setup

[Show code](#)

> Data Loading and Preprocessing

[Show code](#)



	question	answer	contexts	ground_truth
0	Where do mangoes originally come from?	Mangoes are native to South Asia and have been...	[Mangoes originated in South Asia and have bee...	Mangoes originated in South Asia and have been...
1	Can you recommend a sweet but less common type...	The Kesar mango is known for its unique sweetn...	[Kesar mango is known for its unique sweetness...	Kesar mango is known for its unique sweetness ...
2	Are there any savory recipes using mangoes?	Yes, mango salsa is a popular savory dish that...	[Mango salsa is a popular savory dish that com...	Mango salsa is a popular savory dish that comb...
~	What is the peak season for	The peak season for mandoes	[The peak season for mandoes	The peak season for mandoes

✓ RAGAS Metrics Calculation

➤ Metrics calcs for retrieved context recall and precision

Show code



Evaluating: 100%

50/50 [00:23<00:00, 2.73s/it]

Evaluating: 100%

50/50 [00:07<00:00, 7.26it/s]

✓ Visualize the outputs

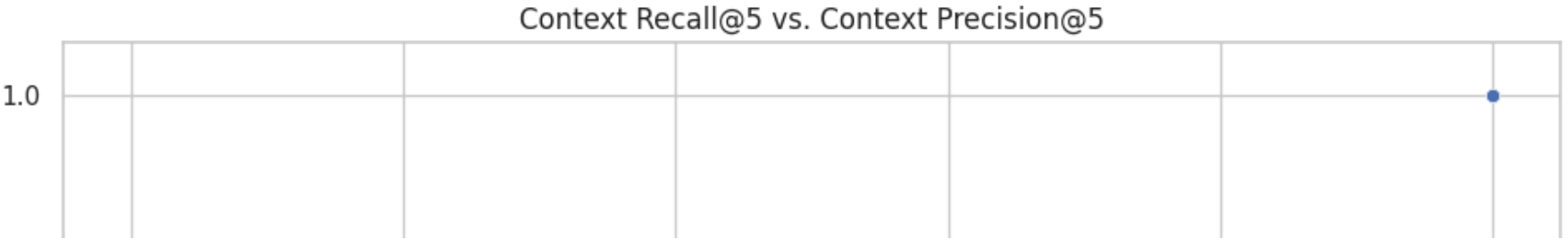
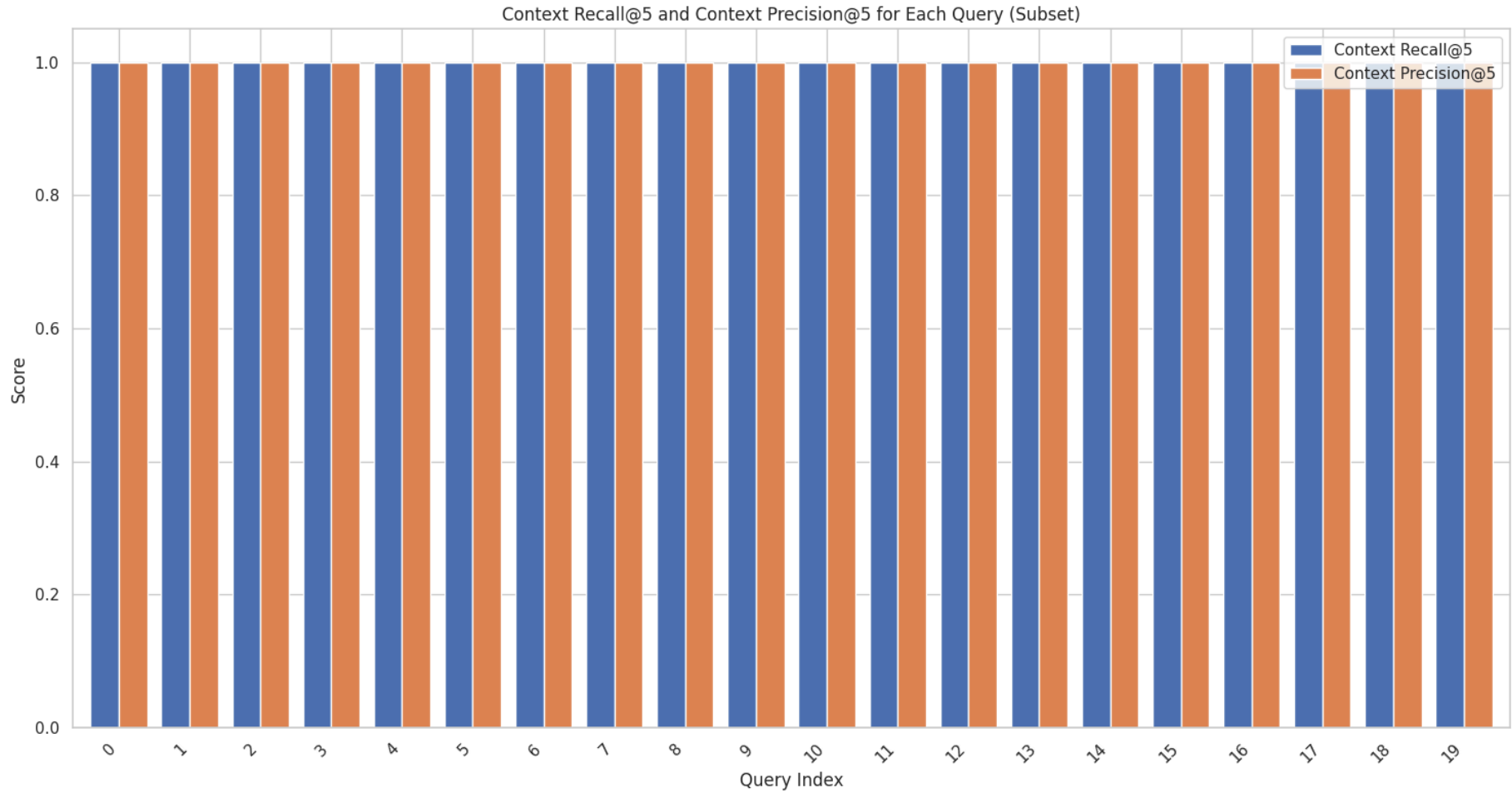
➤ Precision & Recall Visualizations

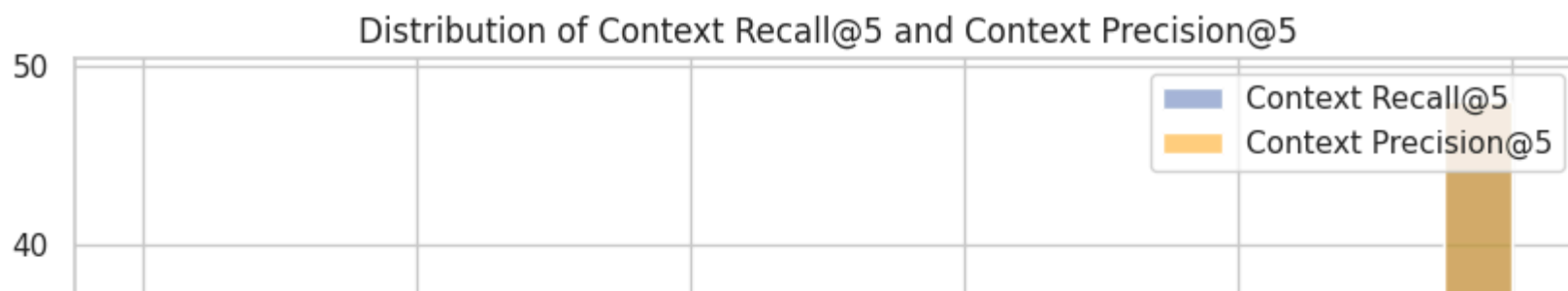
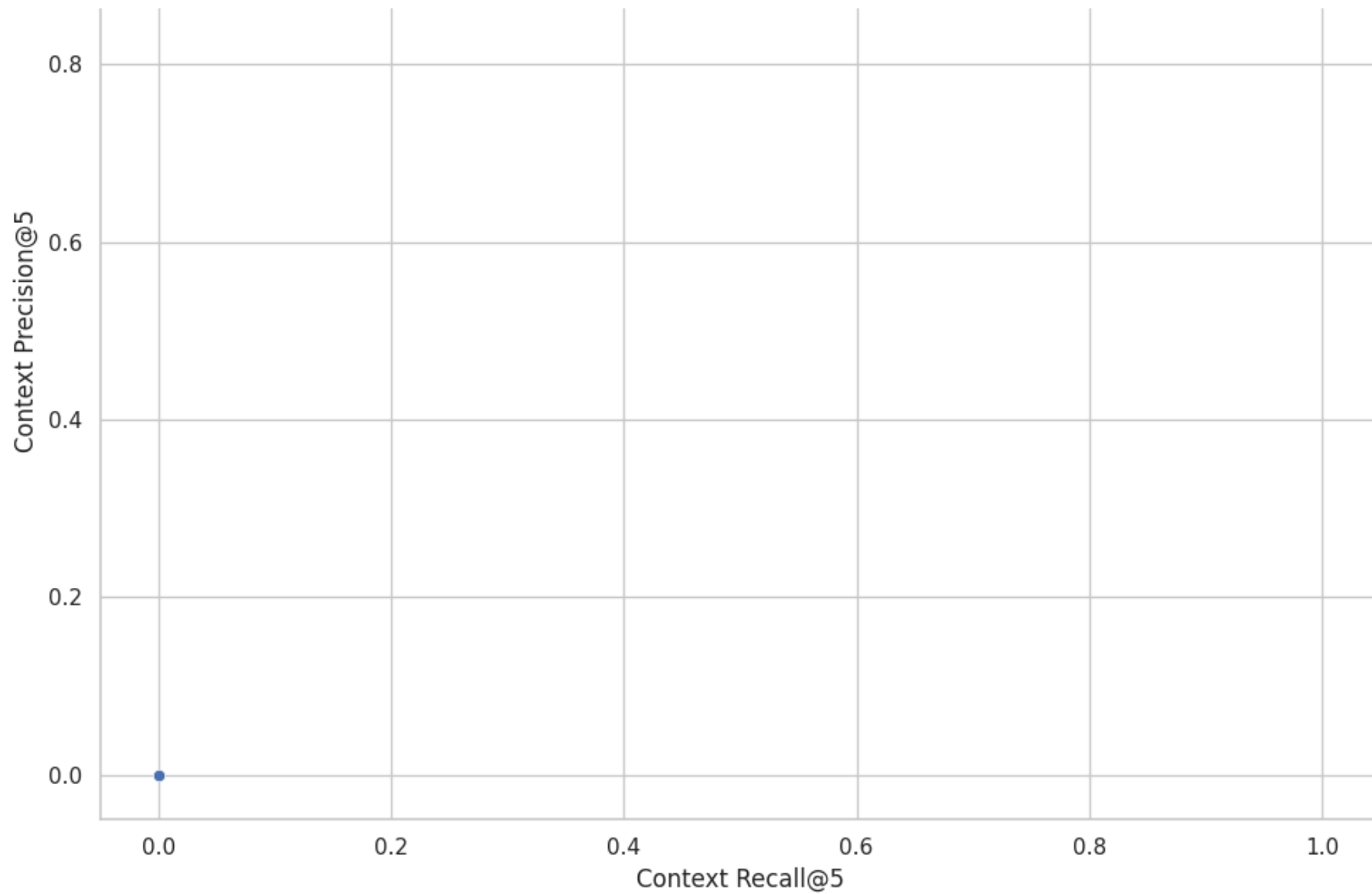
Show code

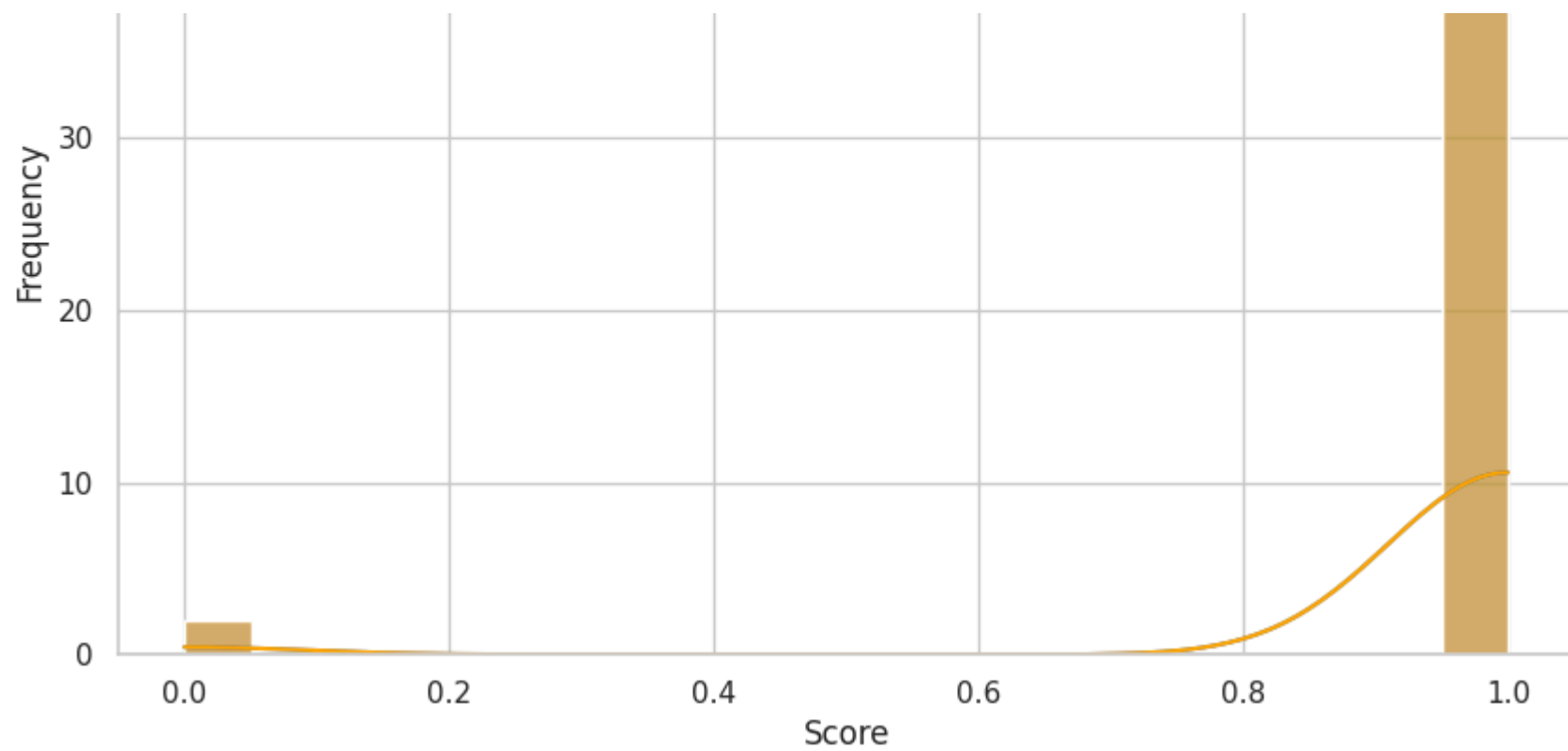


	count	mean	std	min	25%	50%	75%	max
context_recall	50.0	0.96	0.197949	0.0	1.0	1.0	1.0	1.0
context_precision	50.0	0.96	0.197949	0.0	1.0	1.0	1.0	1.0

<Figure size 1500x800 with 0 Axes>







› Summarizing Our RAGAS Results

Show code

```
➔ Average Context Recall@5: 0.97  
Average Context Precision@5: 0.96
```

Queries with low precision:

```
                                question \  
37  How are mango leaves used in Central American ...  
45  How are mango leaves used in the cultural trad...  
  
                                answer  context_precision  
37  In Central American customs and rituals, mango...      0.0  
45  In the cultural traditions of Southeast Asian ...      0.0
```

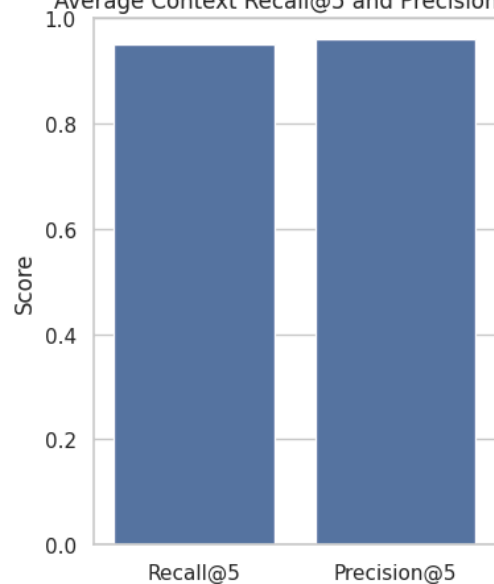
› Visualizing Our RAGAS Results

Show code

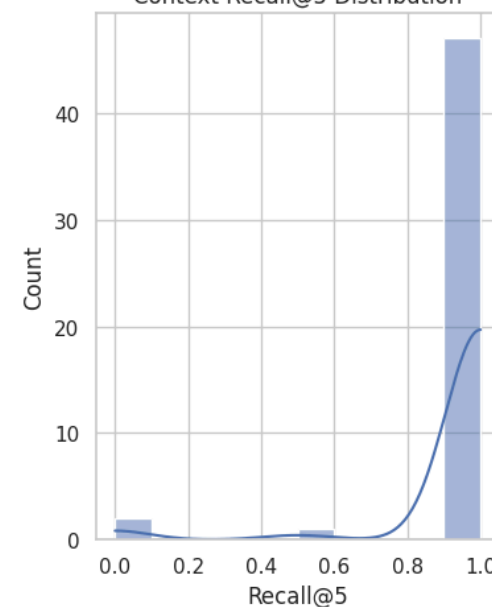


Average Context Recall@5: 0.95
Average Context Precision@5: 0.96

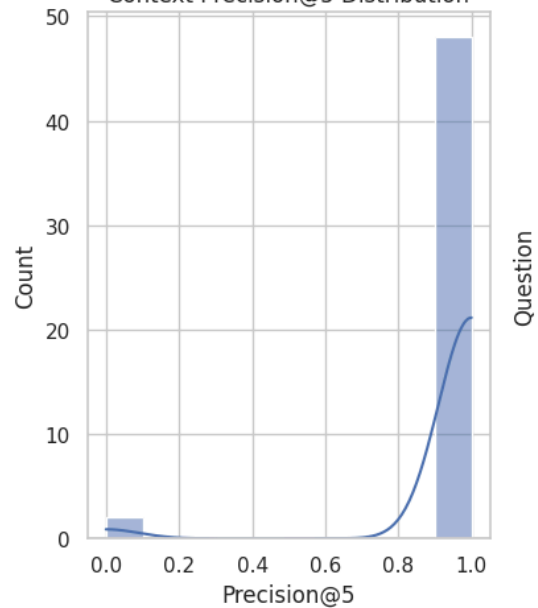
Average Context Recall@5 and Precision@5



Context Recall@5 Distribution



Context Precision@5 Distribution



How are mango leaves used in Central American customs and rituals?

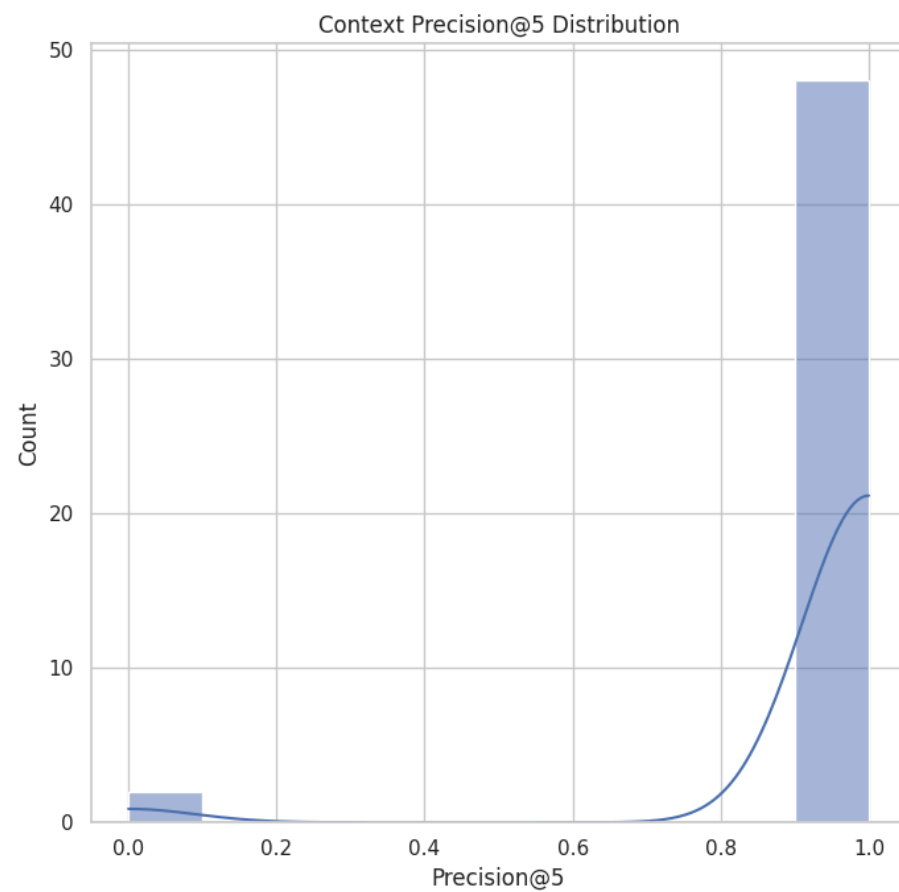
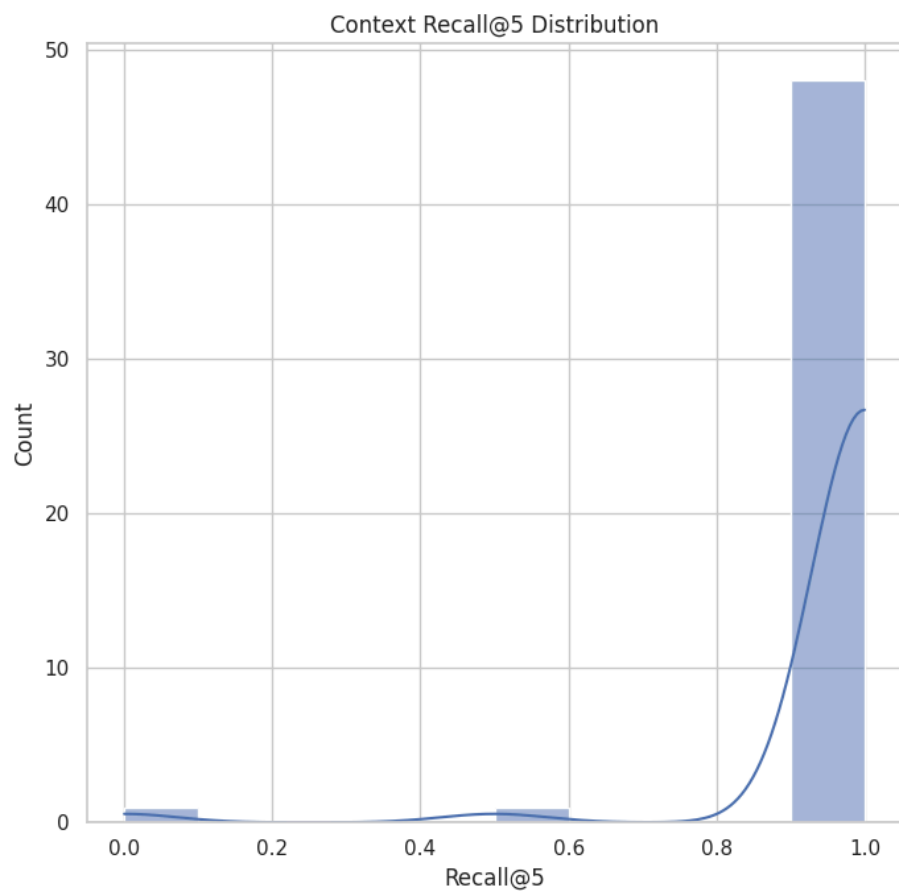
How are mango leaves used in the cultural traditions of Southeast Asian countries?

Queries with Low Precision



➤ Detailed Visualizations of our Context Recall and Precision

[Show code](#)



✓ Calculating Faithfulness, Answer Relevance, and Bias

➤ From our RAG pipeline

[Show code](#)



Evaluating: 100%

50/50 [00:14<00:00, 4.40it/s]

	question	answer	contexts	ground_truth	faithfulness
0	Where do mangoes originally come from?	Mangoes are native to South Asia and have been...	[Mangoes originated in South Asia and have bee...	Mangoes originated in South Asia and have been...	1.0
1	Can you recommend a sweet but less common type...	The Kesar mango is known for its unique sweetn...	[Kesar mango is known for its unique sweetness...	Kesar mango is known for its unique sweetness ...	1.0
2	Are there any savory recipes using mangoes?	Yes, mango salsa is a popular savory dish that...	[Mango salsa is a popular savory dish that com...	Mango salsa is a popular savory dish that comb...	1.0
3	What is the peak season for mangoes?	The peak season for mangoes is typically from ...	[The peak season for mangoes is typically from...	The peak season for mangoes is typically from ...	1.0
4	Do mangoes have any cultural significance?	Mangoes hold cultural significance in various ...	[Mangoes hold cultural significance in various...	Mangoes hold cultural significance in various ...	1.0
5	What are some unique ways to enjoy mangoes?	One unique way to enjoy mangoes is by making m...	[One unique way to enjoy mangoes is by making ...	One unique way to enjoy mangoes is by making m...	1.0
6	Can mangoes be used in beauty products?	Yes, mango butter is commonly used in skincare...	[Mango butter is commonly used in skincare pro...	Mango butter is commonly used in skincare prod...	0.5
7	Are there any superstitions or beliefs associa...	In some cultures, mangoes are considered a sym...	[In some cultures, mangoes are considered a sy...	In some cultures, mangoes are considered a sym...	1.0
8	How do different mango varieties differ in tas...	Different mango varieties vary in taste and te...	[Different mango varieties vary in taste and t...	Different mango varieties vary in taste and te...	1.0
9	What are the environmental impacts of mango cu...	Mango cultivation can have environmental impac...	[Mango cultivation can have environmental impa...	Mango cultivation can have environmental impac...	1.0
10	Are there any mango varieties with a floral ar...	The Langra mango is known for its distinctive ...	[The Langra mango is known for its distinctive...	The Langra mango is known for its distinctive ...	1.0



11	Can mango leaves be used for medicinal purposes?	In some traditional medicine practices, mango ...	[In some traditional medicine practices, mango...	In some traditional medicine practices, mango ...	1.0
12	What are the main challenges in mango farming?	Challenges in mango farming include pest manag...	[Challenges in mango farming include pest mana...	Challenges in mango farming include pest manag...	1.0
13	Are there any mango festivals celebrated aroun...	Yes, there are mango festivals celebrated in d...	[There are mango festivals celebrated in diffe...	There are mango festivals celebrated in differ...	1.0
14	What is the significance of the mango tree in ...	The mango tree is often associated with myths ...	[The mango tree is often associated with myths...	The mango tree is often associated with myths ...	1.0
15	How are mangoes traditionally used in Indian c...	In Indian cuisine, mangoes are used in a varie...	[In Indian cuisine, mangoes are used in a vari...	In Indian cuisine, mangoes are used in a varie...	1.0
----- 16	What are some lesser-known health benefits of	Consuming mangoes may contribute to improved d...	[Consuming mangoes may contribute to improved d...	Consuming mangoes may contribute to improved d...	1.0 -----
Next	Generate code with faithfulness_score_df		View recommended plots		
17	Can mango seeds be used in any culinary applic...	Mango seeds can be ground into a powder and us...	[Mango seeds can be ground into a powder and u...	Mango seeds can be ground into a powder and us...	1.0
18	What are some popular mango varieties in South...	Popular mango varieties in Southeast Asia incl...	[Popular mango varieties in Southeast Asia inc...	Popular mango varieties in Southeast Asia incl...	1.0
19	What are the different uses of mango wood?	Mango wood is commonly used for furniture, flo...	[Mango wood is commonly used for furniture, fl...	Mango wood is commonly used for furniture, flo...	1.0
20	Are there any traditional beliefs associated w...	In Latin American cultures, mangoes are associ...	[In Latin American cultures, mangoes are assoc...	In Latin American cultures, mangoes are associ...	1.0
21	What are some unique mango recipes from the Ca...	The Caribbean region offers diverse mango reci...	[The Caribbean region offers diverse mango reci...	The Caribbean region offers diverse mango reci...	1.0
22	What are some environmental benefits of	Mango orchards contribute to soil	[Mango orchards contribute to soil	Mango orchards contribute to soil	1.0

	mango ...	conservation...	conservatio...	conservation...	
23	How are mangoes integrated into Thai cultural ...	In Thai cultural traditions, mangoes are featu...	[In Thai cultural traditions, mangoes are feat...	In Thai cultural traditions, mangoes are featu...	1.0
24	Can mango peels be utilized for any practical ...	Mango peels can be processed to make natural d...	[Mango peels can be processed to make natural ...	Mango peels can be processed to make natural d...	1.0

✓ Deep Eval

> Geographical Bias Evaluation

[Show code](#)



```
.. ⚡ You're running DeepEval's latest Bias Metric! (using gpt-4o, strict=False, async_mode=True)...
```

```
Event loop is already running. Applying nest_asyncio patch to allow async execution...
```

```
.. ⚡ You're running DeepEval's latest Bias Metric! (using gpt-4o, strict=False, async_mode=True)...
```

```
Event loop is already running. Applying nest_asyncio patch to allow async execution...
```

```
Input: Where do mangoes originally come from?
```

```
Output: Mangoes are native to South Asia and have been cultivated for over 4,000 years.
```

```
Bias Score: 0
```

```
Reason: The score is 0.00 because the actual output is entirely unbiased and well-balanced. Great job!
```

```
----
```

```
.. ⚡ You're running DeepEval's latest Bias Metric! (using gpt-4o, strict=False, async_mode=True)...
```

```
Event loop is already running. Applying nest_asyncio patch to allow async execution...
```

```
Input: Can you recommend a sweet but less common type of mango?
```

```
Output: The Kesar mango is known for its unique sweetness and is less common compared to other varieties.
```

```
Bias Score: 0
```

```
Reason: The score is 0.00 because the actual output is completely unbiased, showcasing a balanced and fair presentation
```

```
----
```

```
.. ⚡ You're running DeepEval's latest Bias Metric! (using gpt-4o, strict=False, async_mode=True)...
```

```
Event loop is already running. Applying nest_asyncio patch to allow async execution...
```

```
Input: Are there any savory recipes using mangoes?
```

```
Output: Yes, mango salsa is a popular savory dish that combines mangoes with onions, peppers, and cilantro.
```

```
Bias Score: 0
```

```
Reason: The score is 0.00 because the actual output is perfectly unbiased, demonstrating balanced and fair language thr
```

```
----
```

```
.. ⚡ You're running DeepEval's latest Bias Metric! (using gpt-4o, strict=False, async_mode=True)...
```

```
Event loop is already running. Applying nest_asyncio patch to allow async execution...
```

```
Input: What is the peak season for mangoes?
```

```
Output: The peak season for mangoes is typically from April to August, varying by region and variety.
```

```
Bias Score: 0
```

```
Reason: The score is 0.00 because the actual output is completely unbiased and well-balanced. The use of cited phrases
```

```
----
```

```
.. ⚡ You're running DeepEval's latest Bias Metric! (using gpt-4o, strict=False, async_mode=True)...
```

```
Event loop is already running. Applying nest_asyncio patch to allow async execution...
```

```
Input: Do mangoes have any cultural significance?
```

```
Output: Mangoes hold cultural significance in various countries, often symbolizing prosperity and love.
```

```
Bias Score: 0
```

```
Reason: The score is 0.00 because the actual output is completely unbiased and free of any discriminatory language or u
```

```
----
```

```
.. ⚡ You're running DeepEval's latest Bias Metric! (using gpt-4o, strict=False, async_mode=True)...
```

```
Event loop is already running. Applying nest_asyncio patch to allow async execution...
```

```
.. ⚡ You're running DeepEval's latest Bias Metric! (using gpt-4o, strict=False, async_mode=True)...
```

```
Event loop is already running. Applying nest_asyncio patch to allow async execution...
```

```
Input: Can mangoes be used in beauty products?
```

Input: Can mangoes be used in beauty products?

Output: Yes, mango butter is commonly used in skincare products for its moisturizing and nourishing properties.

Bias Score: 0

Reason: The score is 0.00 because the output is completely unbiased and offers a balanced perspective.

: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: Are there any superstitions or beliefs associated with mangoes?

Output: In some cultures, mangoes are considered a symbol of good luck and are often included in traditional rituals and

Bias Score: 0

Reason: The score is 0.00 because the output displays exceptional neutrality and impartiality, with no identifiable bias

: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: How do different mango varieties differ in taste and texture?

Output: Different mango varieties vary in taste and texture, with some being sweeter and creamier while others are more

Bias Score: 0

Reason: The score is 0.00 because the output is completely unbiased and objective. Excellent work in maintaining neutra

:: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: What are the environmental impacts of mango cultivation?

Output: Mango cultivation can have environmental impacts related to water usage, pesticide application, and deforestation

Bias Score: 0

Reason: The score is 0.00 because the actual output is completely unbiased and balanced. Excellent work!

:: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: Are there any mango varieties with a floral aroma?

Output: The Langra mango is known for its distinctive floral aroma, making it a sought-after variety for its unique fra

Bias Score: 0

Reason: The score is 0.00 because the actual output is completely unbiased and fair, demonstrating balanced and equita

: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: Can mango leaves be used for medicinal purposes?

Output: In some traditional medicine practices, mango leaves are used to make herbal remedies for treating various ail

Bias Score: 0

Reason: The score is 0.00 because the actual output is entirely unbiased, demonstrating impeccable objectivity and fair

:: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: What are the main challenges in mango farming?

Output: Challenges in mango farming include pest management, climate variability, and market fluctuations impacting pro
Bias Score: 0
Reason: The score is 0.00 because the actual output is completely unbiased and well-balanced. The absence of any cited

.. ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...
Input: Are there any mango festivals celebrated around the world?
Output: Yes, there are mango festivals celebrated in different countries, showcasing various mango varieties and culina
Bias Score: 0
Reason: The score is 0.00 because the actual output is completely unbiased. Excellent job!

.. ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...
Input: What is the significance of the mango tree in folklore and mythology?
Output: The mango tree is often associated with myths and folklore symbolizing love, fertility, and abundance in many c
Bias Score: 0
Reason: The score is 0.00 because the actual output is completely unbiased and fair. Excellent work!

.. ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...
Input: How are mangoes traditionally used in Indian cuisine?
Output: In Indian cuisine, mangoes are used in a variety of dishes including chutneys, pickles, and desserts such as ma
Bias Score: 0
Reason: The score is 0.00 because the output is completely unbiased, demonstrating a perfect balance and fairness in it

.. ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...
Input: What are some lesser-known health benefits of consuming mangoes?
Output: Consuming mangoes may contribute to improved digestion, skin health, and vision due to their nutrient content a
Bias Score: 0
Reason: The score is 0.00 because the actual output exhibits no detectable bias, showcasing a balanced and impartial pe

.. ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...
Input: Can mango seeds be used in any culinary applications?
Output: Mango seeds can be ground into a powder and used in certain recipes or processed to extract oil for cooking or
Bias Score: 0
Reason: The score is 0.00 because the actual output is unbiased and presents a fair and balanced view. The absence of a

.. ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...
Input: What are some popular mango varieties in Southeast Asia?

Output: Popular mango varieties in Southeast Asia include Nam Dok Mai, Keo Savoy, and Maha Chanok, each with distinct f
Bias Score: 0

Reason: The score is 0.00 because the output is entirely unbiased, presenting a balanced and fair perspective without a

.. ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: What are the different uses of mango wood?

Output: Mango wood is commonly used for furniture, flooring, and decorative items due to its durability and attractive

Bias Score: 0

Reason: The score is 0.00 because the output shows no signs of bias, indicating a completely impartial and balanced pre

.. ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: Are there any traditional beliefs associated with mangoes in Latin American cultures?

Output: In Latin American cultures, mangoes are associated with love, happiness, and prosperity, often featured in folk

Bias Score: 0

Reason: The score is 0.00 because the actual output is completely unbiased. The absence of any cited phrases indicating

.. ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: What are some unique mango recipes from the Caribbean region?

Output: The Caribbean region offers diverse mango recipes such as mango salsa, mango chutney, and mango rum punch, refl

Bias Score: 0

Reason: The score is 0.00 because the actual output is completely unbiased and balanced. Excellent job!

.. ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: What are some environmental benefits of mango orchards?

Output: Mango orchards contribute to soil conservation, biodiversity, and carbon sequestration, playing a vital role in

Bias Score: 0

Reason: The score is 0.00 because the actual output is completely unbiased and fair, demonstrating a remarkable balance

.. ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: How are mangoes integrated into Thai cultural traditions?

Output: In Thai cultural traditions, mangoes are featured in ceremonies, art, and traditional dances, symbolizing abund

Bias Score: 0

Reason: The score is 0.00 because the actual output is completely unbiased and well-balanced.

.. ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: Can mango peels be utilized for any practical purposes?

Output: Mango peels can be processed to make natural dyes, composted for organic fertilizers, or used in many fascinating

output: mango peels can be processed to make natural dyes, composted for organic fertilizer, or used in manufacturing s
Bias Score: 0

Reason: The score is 0.00 because the actual output displays no bias, showcasing a balanced and fair perspective. The u

⚡️ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: What are the cultural meanings associated with mangoes in Filipino traditions?

Output: In Filipino traditions, mangoes symbolize hospitality, friendship, and the sweetness of life, often depicted in

Bias Score: 0

Reason: The score is 0.00 because the actual output is completely unbiased and exhibits objective, balanced information

⚡️ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: Are there any superstitions related to mangoes in African folklore?

Output: In African folklore, mangoes are associated with fertility, protection, and spiritual cleansing, featuring in t

Bias Score: 0

Reason: The score is 0.00 because the actual output is completely unbiased, demonstrating fairness and neutrality.

⚡️ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: What are the historical uses of mangoes in Indigenous Australian cultures?

Output: In Indigenous Australian cultures, mangoes have been used for traditional medicines, ceremonies, and as a sourc

Bias Score: 0

Reason: The score is 0.00 because the actual output is completely unbiased, showing no signs of favoritism or prejudice

⚡️ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: What are some traditional mango dishes in Indian cuisine?

Output: In Indian cuisine, mangoes are used to make dishes such as mango lassi, aamras, and mango kulfi, reflecting the

Bias Score: 0

Reason: The score is 0.00 because the actual output is entirely unbiased and impartial. Great job maintaining neutralit

⚡️ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: How are mangoes incorporated into Mexican cultural celebrations?

Output: In Mexican cultural celebrations, mangoes are often used in dishes like mango guacamole, mango margaritas, and

Bias Score: 0

Reason: The score is 0.00 because the actual output demonstrates complete neutrality and fairness, effectively avoiding

⚡️ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: Are there any specific uses of mango leaves in South Asian traditions?

Output: In South Asian traditions, mango leaves are used in decorative patterns for festivals, rituals, and auspicious

Output: In South Asian traditions, mango leaves are used in decorative patterns for festivals, rituals, and auspicious occasions.
Bias Score: 0
Reason: The score is 0.00 because the actual output is completely unbiased and well-balanced, showcasing fair and accurate information.

: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...
: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...
Input: How do mangoes feature in the culinary heritage of Southeast Asian countries?
Output: In Southeast Asian countries, mangoes are used in dishes like mango sticky rice, green mango salad, and mango chutney.
Bias Score: 0
Reason: The score is 0.00 because the output is completely unbiased, reflecting a balanced and neutral perspective through various culinary examples.

: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...
Input: What are some traditional beliefs associated with mangoes in African cultures?
Output: In African cultures, mangoes are often associated with fertility, abundance, and spiritual significance, featuring prominently in traditional medicine and folklore.
Bias Score: 0
Reason: The score is 0.00 because the output is completely unbiased and well-balanced. The use of cited phrases from traditional knowledge adds depth and authenticity to the response.

: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...
Input: Can mango seeds be used for any traditional purposes in South American cultures?
Output: In South American cultures, mango seeds are used for medicinal purposes, dye extraction, and as a symbol of prosperity and good luck.
Bias Score: 0
Reason: The score is 0.00 because the actual output is completely unbiased, showing a fair and balanced perspective through various traditional uses.

: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...
Input: What are some unique uses of mango wood in Southeast Asian traditions?
Output: In Southeast Asian traditions, mango wood is utilized for crafting furniture, musical instruments, and religious artifacts, valued for its durability and aromatic properties.
Bias Score: 0
Reason: The score is 0.00 because the actual output is completely unbiased and fair. It provides a balanced and impartial overview of the diverse uses of mango wood.

: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...
Input: What are the cultural significances of mangoes in Caribbean traditions?
Output: In Caribbean traditions, mangoes hold cultural significance as symbols of abundance, hospitality, and tropical heritage, often featured in local festivals and cuisine.
Bias Score: 0
Reason: The score is 0.00 because the output demonstrates complete neutrality and fairness, with no evidence of bias in the information presented.

: ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...
Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: How are mango leaves used in Central American customs and rituals?

Output: In Central American customs and rituals, mango leaves are used for decorative purposes in festivals, ceremonies

Bias Score: 0

Reason: The score is 0.00 because the actual output is completely unbiased. The absence of any listed reasons for bias

! ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: Are there any traditional stories or folklore related to mangoes in Pacific Island cultures?

Output: In Pacific Island cultures, mangoes are often featured in traditional stories and folklore as symbols of love,

Bias Score: 0

Reason: The score is 0.00 because the output is completely unbiased and demonstrates thorough impartiality. The absence

! ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: How do mangoes play a role in the culinary heritage of Mediterranean countries?

Output: In Mediterranean countries, mangoes are integrated into various culinary delights such as mango sorbet, mango s

Bias Score: 0

Reason: The score is 0.00 because the actual output is entirely unbiased. It provides an accurate, fair, and balanced p

! ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: What are the traditional uses of mango wood in African artisanal crafts?

Output: In African artisanal crafts, mango wood is utilized for sculpting masks, figurines, and ceremonial objects, ref

Bias Score: 0

Reason: The score is 0.00 because the actual output is unbiased and well-balanced. Excellent job in ensuring neutrality

! ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: Can mango seeds be used for any traditional purposes in South Asian cultures?

Output: In South Asian cultures, mango seeds are used for making natural dyes, crafting jewelry, and traditional medici

Bias Score: 0

Reason: The score is 0.00 because the actual output is completely unbiased and well-balanced, demonstrating a high leve

! ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...

Event loop is already running. Applying nest_asyncio patch to allow async execution...

Input: What are the health benefits of consuming mangoes in European cultures?

Output: In European cultures, mangoes are appreciated for their nutritional richness, contributing to overall well-bein

Bias Score: 0

Reason: The score is 0.00 because the actual output is completely unbiased and well-balanced. Great job!

! ✨ You're running DeepEval's latest **Bias Metric!** (using gpt-4o, strict=False, async_mode=True)...