Syracuse University

Research Analyst

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Research Task – 5 (Extension)

Due date: 08/15/25,

Number of pages: 29

Introduction:

The goal of this task is to try out a LLM Model Like GPT, Claude or Any of the models available and ask questions about a dataset to the model.

Hence, I took a dataset of Cricket, which is popular sport in my home country and asked questions to models Like ChatGpt, below is a summarized version of my analysis.

Dataset info:

It's a decent size dataset which talks about ICC Cricket World Cup 2024 year. It contains match level statistics until the final match.

Using this Dataset, I have asked ChatGpt some questions in natural language.

Models Tested:

- 1. ChatGpt O3:- Very Advanced reasoning feature + Internet search
- 2. ChatGpt 4O:- General purpose tasks
- 3. ChatGpt 4O-Mini :- Some level of Reasoning
- 4. ChatGpt 4O-Mini High: Some level of Faster Reasoning + Internet Search
- 5. ChatGpt 5:- The Latest Release model in 08/2025 with below features and its blazingly fast
 - -Auto :- Decides How long to Think
 - -Fast :- Instant Answers
 - Thinking :- Thinks longer for better answers

Questions:

- 1. Which Player has the most Player of The Match title?
- 2. Which Player is the Best Bowler across all matches?
- Across the Top Scorer per match, who is the one name that we see frequently?
- 4. What is the most Toss Decision teams are choosing?

- 5. Which team won most of the matches?
- 6. What is the top venue based on matches played?
- 7. What is that one team that has won most of their Tosses?
- 8. On Monday, June 3rd of 2024, there was a match between South Africa and Sri Lanka. Can you summarize the outcome & stats for that match.
- 9. As a Team India's Head Coach, I want to know for the Next Year World Cup Who might be my team's opponent for the Semi Finals, & Finals. Also, what are my team's chances to win it?

Summary of Results:

Overall, I would say ChatGpt's O3 version outperformed all the other versions, when it comes to Semantic Reasoning, Advanced Reasoning (deterministic statistics for a reason from gpt), Internet search + Future Predictions based on advanced reasoning & Past Data.

Gpt-40 is normally suited for small general tasks, where we can get a result by small operation like, Finding A or B won the specific match, Count of matches played at a venue etc. It could not answer well on questions like "Top scorer of the games" Etc, & Questions which would require semantic/advanced reasoning.

Gpt-4o-mini: This version of the model was decent, it's almost comparable to O-3 model, but this doesn't go in depth of reasoning, and it won't try to do internet search when it doesn't know the answer.

Gpt-4o-mini-high: This version of the model was decent too, it's almost comparable to O-3 model in terms of internet search & decent reason capabilities (no-depth of reasoning).

Gpt 5: This is a tricky model because if we use auto detect feature it will decide dynamically by itself if it needs strong reasoning capabilities and other tools. Otherwise it behaves like a Gpt 4.

My Ranking Order would be (if Futuristic Predictions matter too with some solid reasoning):

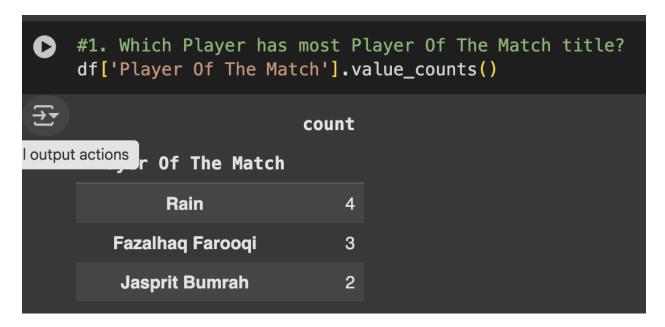
O3 >>>> 40-mini-high >>> 5 (With auto detect feature) > 40-mini >>>> 40

<u>O3 >>> 5 (Without auto detect feature) >>>> 40-mini-high >>> 40-mini >>>> 40</u>

Screenshots:

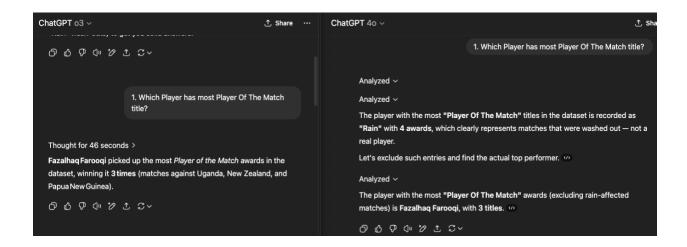
1. Which Player has the most Player of The Match title?

Factual O/P:

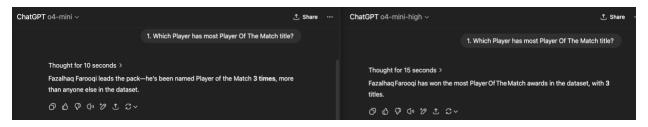


LLM O/P's:

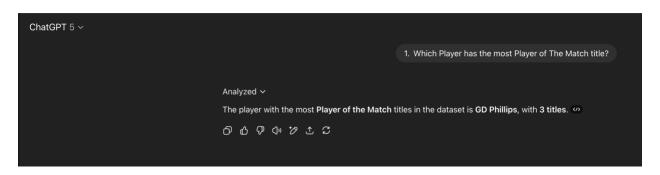
~O3 & 4O:



~o4-mini and o4- Mini-High:



GPT 5:



Notes: As you can observe if we exclude "Rain" from weather. The factual o/p is "Fazalhaq Farooqi" & **All of the models** gave us right answer since it's a simple task. Unfortunately, GPT 5 didn't do good here.

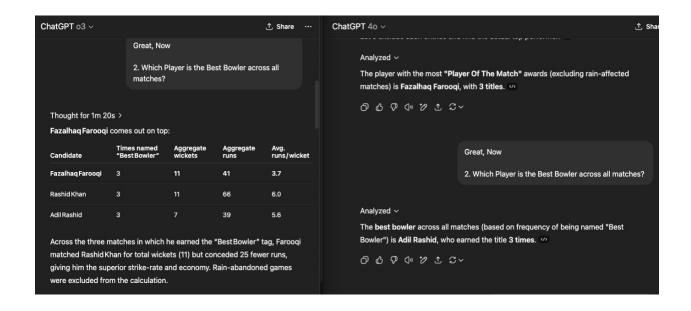
2. Which Player is the Best Bowler across all matches?

Factual O/P's:

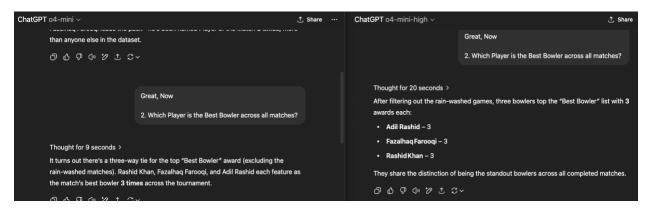
<pre>#2. Which Player is the Best Bowler across all matches? df['Best Bowler'].value_counts()</pre>					
	count				
Best Bowler					
Rain	4				
Fazalhaq Farooqi	3				
Rashid Khan	3				
Adil Rashid	3				
Jasprit Bumrah	2				

LLM O/P's:

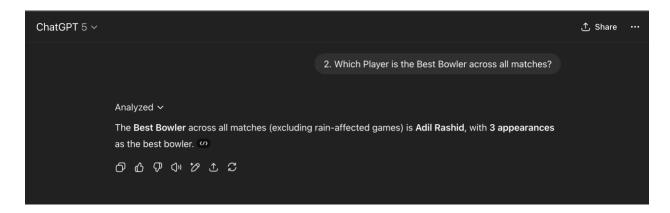
~03 & 40:



~o4-mini and o4- Mini-High:

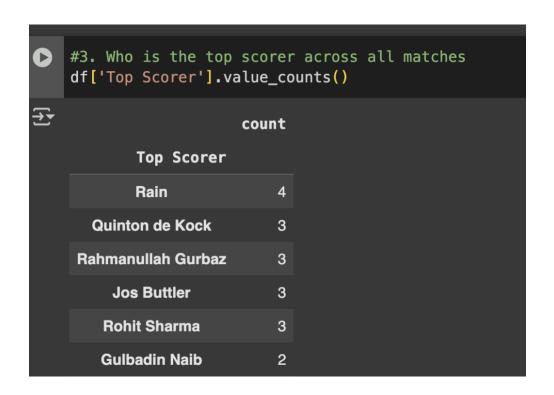


GPT 5 :



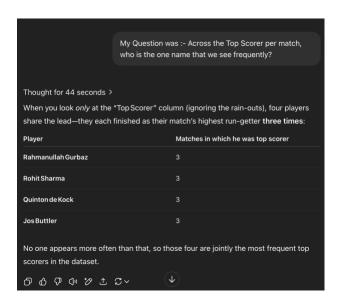
Notes: As you can see apart from 40, & 5. Every other model gave us right answer as it's a tie between 3 cricketers. 40, 5 cannot do reasoning well. I believe for 5 it's because of its auto switching capabilities, its deciding to not use o3 level of reasoning.

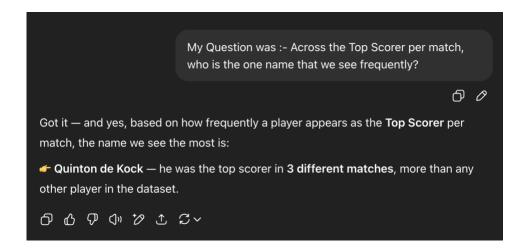
3. Across the Top Scorer per match, who is the one name that we see frequently? <u>Factual O/P's</u>:



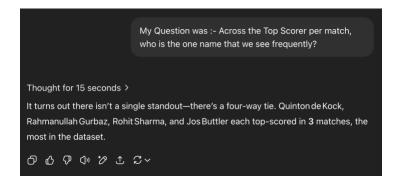
LLM O/P's:

~03

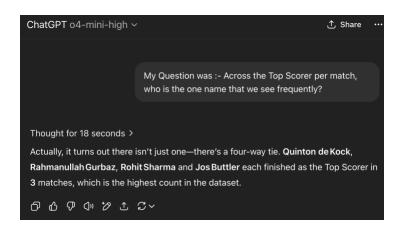




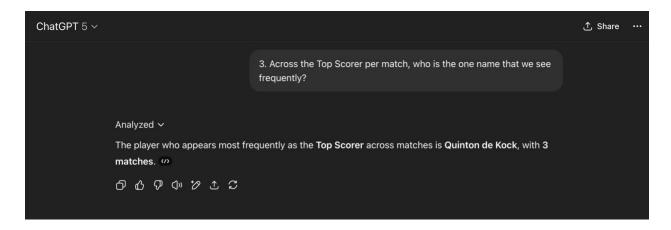
~*o4-mini*



~o4-mini-high



GPT 5 :



Notes: As you can see except 40,& 5 rest of the models are doing a good job in finding the top scorer. 40 lacks advanced reasoning/ some level of reasoning capabilities. I believe for 5 it's because of its auto switching capabilities, its deciding to not use o3 level of reasoning.

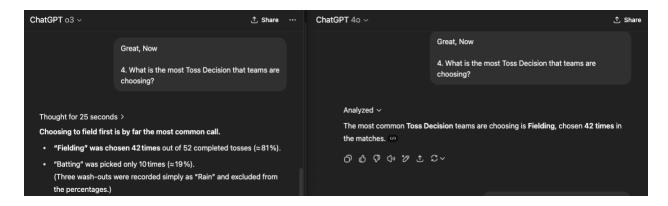
4. What is the most Toss Decision teams are choosing?

Factual O/P's:

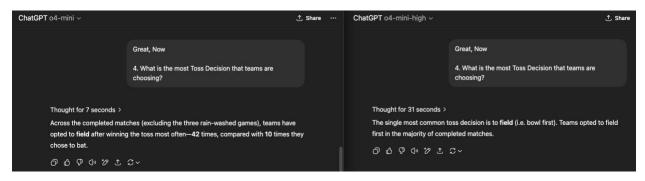
]	#What is the modf['Toss Decisi		Decision that teams are choosing?
count			
	Toss Decision		
	Fielding	42	
	Batting	10	
	Rain	3	
	dtype: int64		

LLM O/P's:

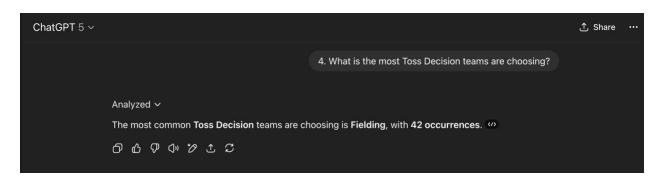
~03 & 40:



~o4-mini and o4- Mini-High:



GPT 5:



Notes: Since it's a simple intuitive counting and task and has less modality all of the models were able to answer it correctly.

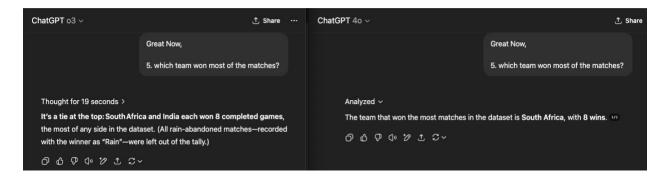
5. Which team won most of the matches?

Factual O/P's:

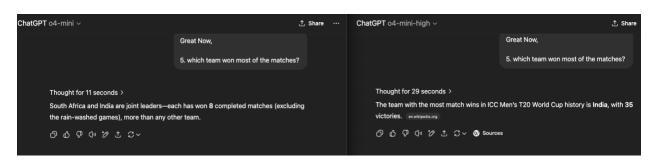


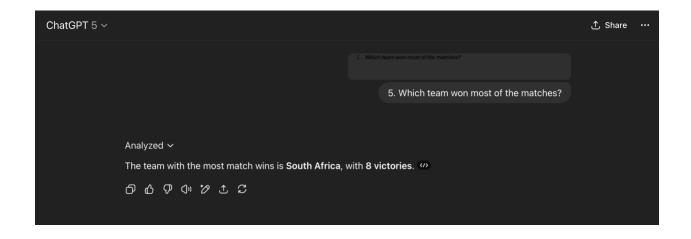
LLM O/P's-

~03 & 40:



~o4-mini and o4- Mini-High:

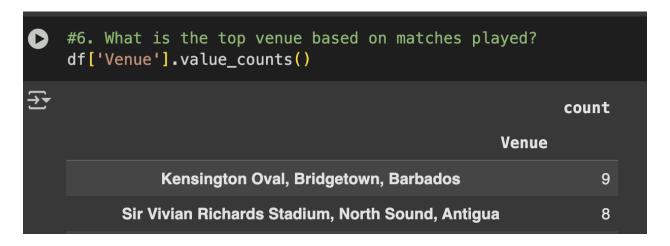




Notes: As you can see 40 didn't perform good here because of reasoning capabilities and interestingly o4-mini-high did an internet search, and gave a different result. Perhaps we should do a better prompt that would enforce the LLM to answer strictly from the dataset. I believe for 5 it's because of its auto switching capabilities, its deciding to not use o3 level of reasoning

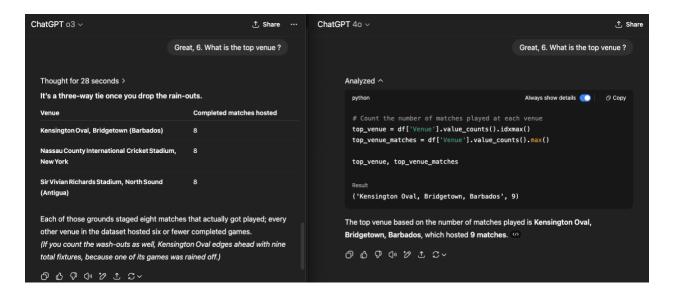
6. What is the top venue based on matches played?

Factual O/P's:

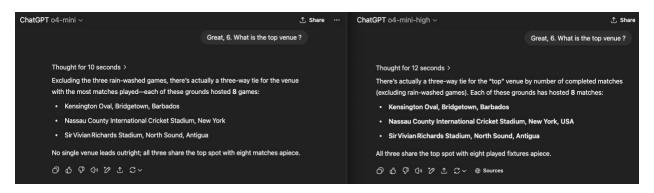


LLM O/P's:

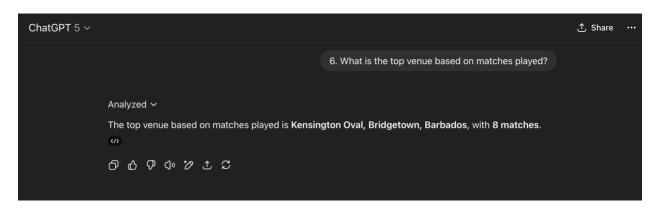
~03 & 40:



~o4-mini and o4- Mini-High:



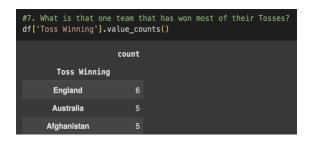
GPT 5 :



Notes: Here, if we exclude "Rain Weather" The answer would be a three way tie, and all of the models except 40 & 5 is unable to figure it out.

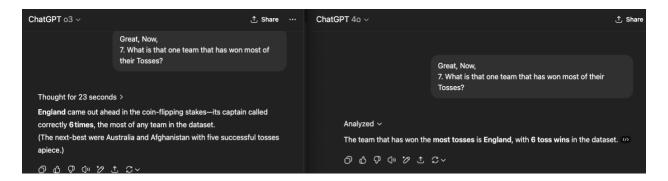
7. What is that one team that has won most of their Tosses?

Factual O/P's:

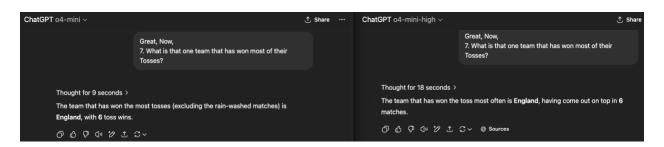


LLM O/P's:

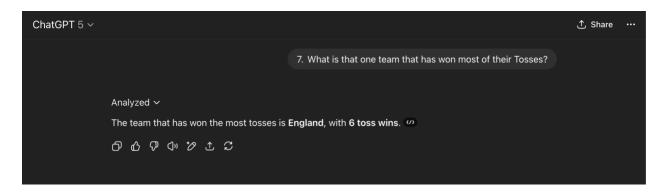
~03 & 40:



~o4-mini and o4- Mini-High:



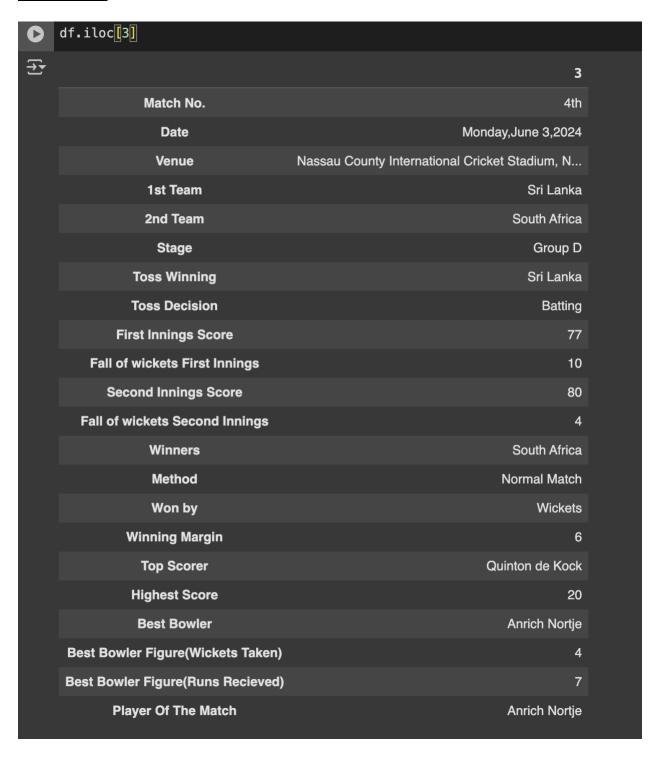
GPT 5 :

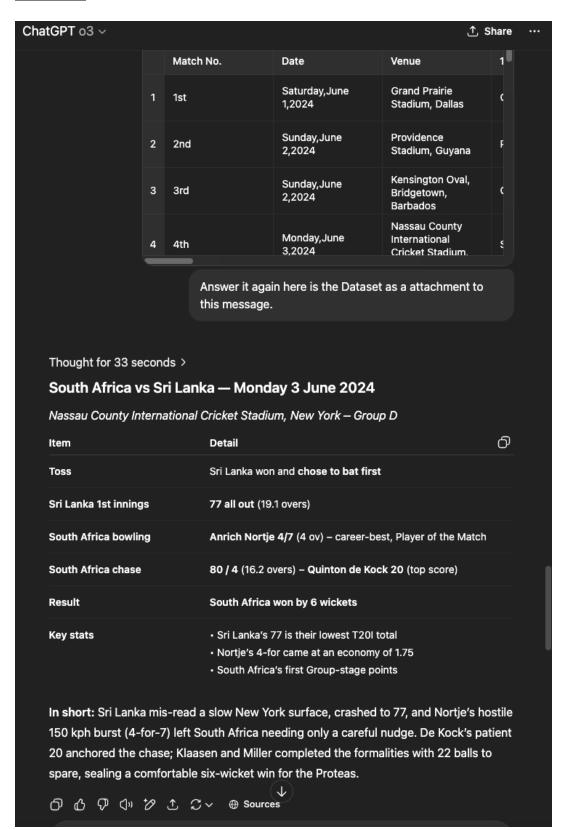


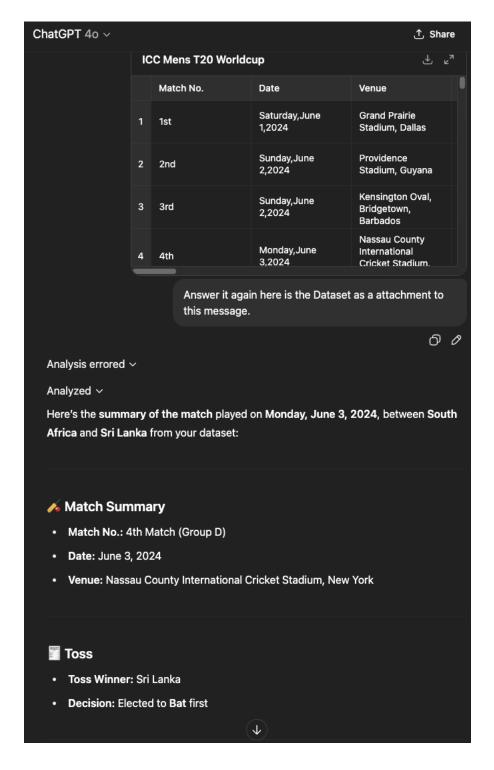
Notes: Since it's a simple intuitive counting and task and has less level of reasoning required, all of the models were able to answer it correctly.

8. On Monday, June 3rd of 2024, there was a match between South Africa and Sri Lanka. Can you summarize the outcome & stats for that match.

Factual O/P's:







nnings Summary

Team	Score	Wickets Fallen
Sri Lanka	77	10
South Africa	80	4

Y Match Result

Winner: South AfricaMethod: Normal MatchVictory By: 6 wickets

Top Performers

• Top Scorer: Quinton de Kock (20 runs)

• Best Bowler: Anrich Nortje

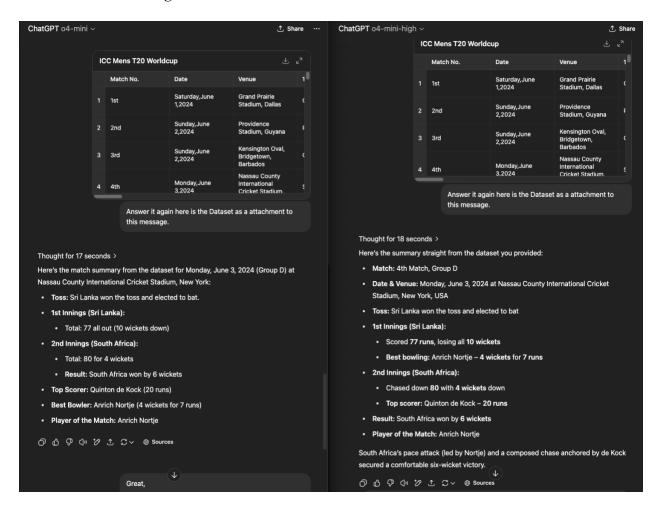
• Bowling Figures: 4 wickets for 7 runs

• Player of the Match: Anrich Nortje

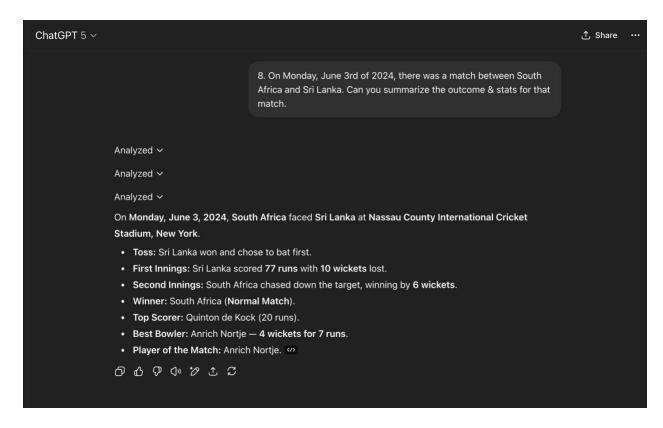
Let me know if you'd like a visualization or want to analyze another match! ω

O C O O O D L C >

~o4-mini & o4-mini-high



GPT 5:



Notes: Gpt o3 outshined all the other models by giving us deeper statistics with power of internet data to & data set context. 4o, & 5 was equally good by giving us accurate info as per dataset. Gpt o4mini & mini high were similar to 4o as well.

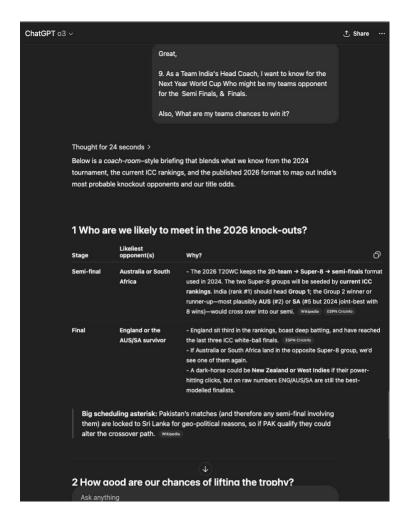
9. As a Team India's Head Coach, I want to know for the Next Year World Cup Who might be my team's opponent for the Semi Finals, & Finals. Also, what are my team's chances to win it?

Factual O/P's:

Just by having domain knowledge in this I asked this question.

LLM O/P's:

~03



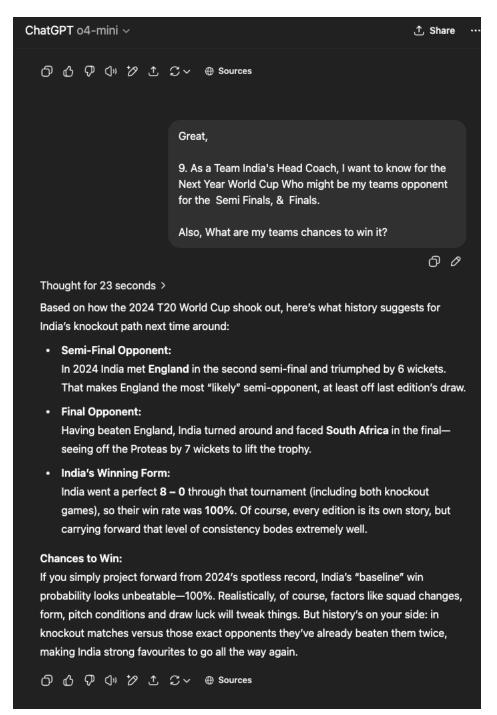


What this means for prep

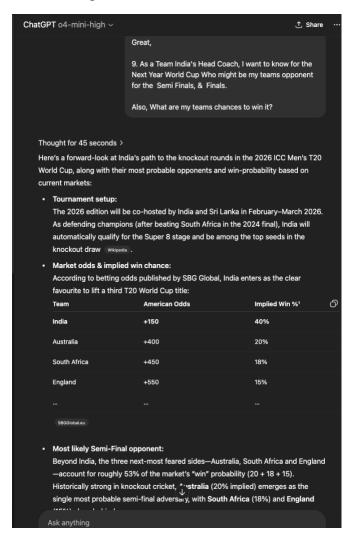
- 1. Match-up drills:
 - AUS/SA quicks on slower Indian decks → simulate high-pace in nets at Chennai or Vizag with older balls.
 - ENG death overs → practise yorker counter-measures and boundary options in the final four.
- Spin-to-win wickets: As co-hosts we can lean into tackier squares (e.g., Lucknow, Chepauk) for Super-8s, forcing England/Australia out of their comfort zone.
- 3. Contingency for Pakistan/Sri Lanka semis: keep a bowling group in Colombo a week earlier to acclimatise if the crossover shifts there.

With the squad clicking and conditions favourable, anything short of the final will feel under-par; the data says we have roughly a one-in-three shot at finishing the job.





~o4-mini-high



Most likely Final opponent:

If India navigates its semi, the likeliest final opponent in 2026 is **South Africa**—the 2024 runners-up—followed by Australia and then England. South Africa's +450 odds (≈18%) and recent finals pedigree make it the leading contender to meet India again on the biggest stage.

· Chances to win it:

India's +150 line translates to an ≈40% chance of winning the whole tournament by far the highest single probability among the 20 participants. In plain terms, markets are forecasting that India will lift the trophy in about four out of every ten scenarios.

 1 Implied win % = 100 / (odds + 100) for positive-odd favourites. $$^{''}$$ Wikipedia $$^{''}$$ S80Global eu



9. As a Team India's Head Coach, I want to know for the Next Year World Cup Who might be my teams opponent for the Semi Finals, & Finals.

Also, What are my teams chances to win it?

Analyzed ~

As **Team India's Head Coach**, here's your analysis from the current dataset for the **2024 T20 World Cup** outcomes — which can guide you in anticipating potential opponents and India's winning momentum:

Semi-Final (2nd Semi-Final)

- Opponent: England
- Venue: Providence Stadium, Guyana
- . Toss: England won and chose to field
- India's Score: 141/7
- England's Score: 103 all out
- Result: India won by 68 runs
- Top Scorer (India): Rohit Sharma 57
- Best Bowler: Axar Patel 3/23
- Player of the Match: Axar Patel

T Final

- Opponent: South Africa
- Venue: Kensington Oval, Bridgetown, Barbados
- Toss: India won and chose to bat
- India's Score: 176/7
- South Africa's Score: 169/8
- Result: India won by 7 runs
- Top Scorer: Virat Kohli 76
- Best Bowler: Hardik Pandya 3/20
- Player of the Match: Virat Kohli

Strategic Outlook for Next Year

Based on 2024:

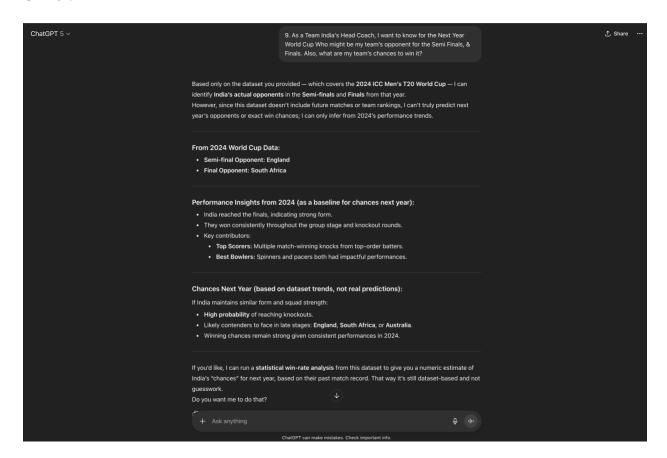
- Likely Semi-Final Rival: England (again, if they stay in top 4 seeds)
- Likely Final Opponent: South Africa (strong contender reaching finals)
- India's Form: 🤚 Very strong beat both major opponents with confidence
- Key Performers to Back:
 - Rohit Sharma (clutch opening)
 - Virat Kohli (big match temperament)
 - Axar Patel & Hardik Pandya (game-changing all-rounders)

✓ Winning Chances Next Year?

If the team composition, leadership, and momentum continue the way they were in 2024:

- India is very likely to be a title contender again.
- Historical match data shows strong defense and chase capabilities.
- Balanced squad with experienced match-winners in both batting and bowling.

GPT 5:



Notes:

As you can see Gpt o3, outshines others by doing better deterministic future predictions by taking current statistical contexts, Internet Context, Semantic advanced reasoning, & Not going by current groups level stages, understanding nuances of domain level cricket.

Gpt 5, 40 and 40 mini high are little better than Gpt 40 but no way near to o3 in this level of deeper research and future level predictions.