Original Question History

	Ranking			Points		Player Id		Tours				
anking 1		1		9,985		3		11				
			ld	Tour		rney	W	inner Id	Year			
Match	ies	es 1		Australian Ope		an Open	3		2018			
Playe			Name			Nation		<u>Id</u>	Continent			
				okovic		Serbia		1	Europe			
		ers	С	saka		Japan		2	Asia			
			Fe	Federer		Switzerland		3	Europe			

Q1: How many players are there?

A1: SELECT COUNT(DISTINCT name) FROM players

Q2: Which ones won in the tourney Australian Open?

A2: SELECT name FROM players JOIN matches WHERE tourney =

'Australian Open'

Q3: Return the points of these players who come from Europe?

A3: ?

Structure-Aware Annotator

Input with Structure Mark

[Table] [H] Matches | Ranking | [M] [H] Players

[Column] [M] Ranking.Player id | ... | [H] Players.name

[Graph] (Ranking -> Matches) | (Players -> Matches)

[History] How many players are there? Which ones

[Question] Return the points of these players who come from Europe?

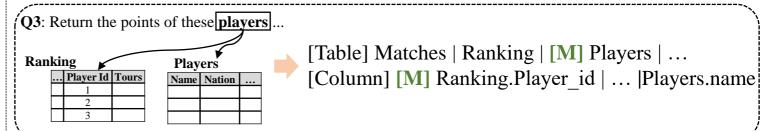
[Table] Matches | Ranking | Players

[Column] Ranking.Player_id | ... | Players.name

[History] How many players are there? Which ones

[Question] Return the points of these players who come from Europe?

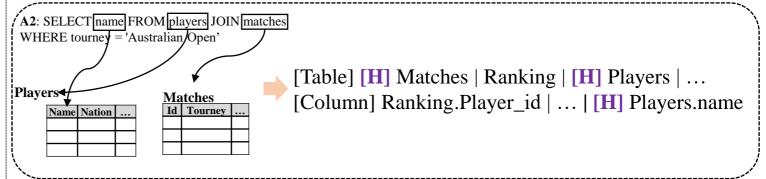
(a) Flatten Question and Schema



(b) Schema Linking



(c) Database Structure



(d) Discourse Structure