

# DS2500 - Final Presentation

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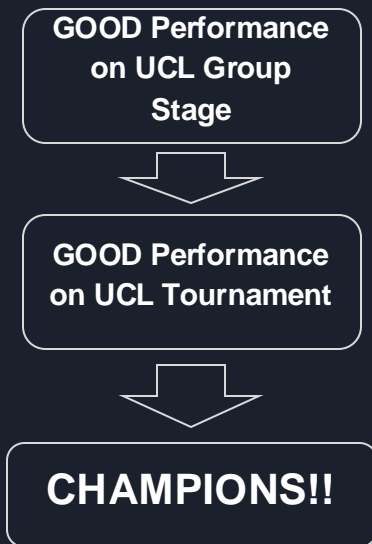


# QUESTION

Prev Question:

Does a team's performance on the group stage lead them to the championship?

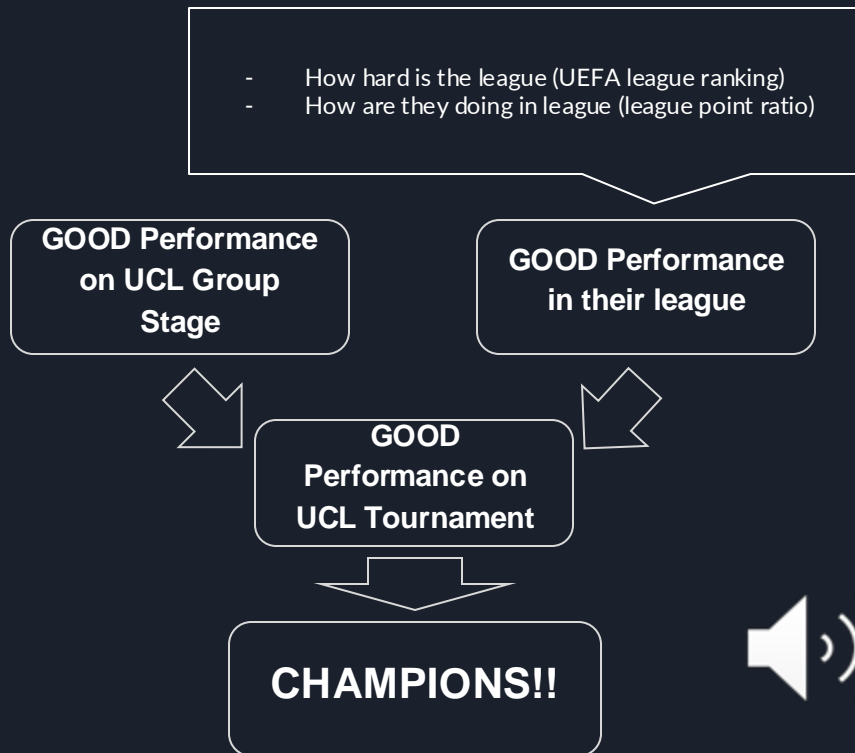
Reasons:



After I changed, new question is...

Does a team's performance of first half season lead them to the championship?

Reasons:



# DATA

Match Number	Round Number	Date	Location	Home Team	Away Team	Group	Result
1	1	06/09/2022 16:45	Stadion Maksimir	Dinamo Zagreb	Chelsea	Group E	1 - 0
2	1	06/09/2022 16:45	BVB Stadion Dortmund	Dortmund	Copenhagen	Group G	3 - 0
3	1	06/09/2022 19:00	Stadion Salzburg	Salzburg	Milan	Group E	1 - 1
4	1	06/09/2022 19:00	Celtic Park	Celtic	Real Madrid	Group F	0 - 3
5	1	06/09/2022 19:00	RB Arena	Leipzig	Shakhtar Donetsk	Group F	1 - 4
6	1	06/09/2022 19:00	Estadio Ramón Sánchez-Pizjuán	Sevilla	Man City	Group G	0 - 4
7	1	06/09/2022 19:00	Parc des Princes	Paris	Juventus	Group H	2 - 1
8	1	06/09/2022 19:00	Estádio do SL Benfica	Benfica	M. Haifa	Group H	2 - 0
9	1	07/09/2022 16:45	Johan Cruyff ArenA	Ajax	Rangers	Group A	4 - 0
10	1	07/09/2022 16:45	Frankfurt Stadion	Frankfurt	Sporting CP	Group D	0 - 3
11	1	07/09/2022 19:00	Stadio Diego Armando Maradona	Napoli	Liverpool	Group A	4 - 1
12	1	07/09/2022 19:00	Estadio Metropolitano	Atlético	Porto	Group B	2 - 1
13	1	07/09/2022 19:00	Jan Breydelstadion	Club Brugge	Leverkusen	Group B	1 - 0
14	1	07/09/2022 19:00	Camp Nou	Barcelona	Pizzen	Group C	5 - 1
15	1	07/09/2022 19:00	Stadio San Siro	Inter	Bayern	Group C	0 - 2
16	1	07/09/2022 19:00	Tottenham Hotspur Stadium	Tottenham	Marseille	Group D	2 - 0
17	2	13/09/2022 16:45	Stadion mesta Pizze	Pizzen	Inter	Group C	0 - 2
18	2	13/09/2022 16:45	Estádio José Avelar	Sporting CP	Tottenham	Group D	2 - 0
19	2	13/09/2022 19:00	Anfield	Liverpool	Ajax	Group A	2 - 1
21	2	13/09/2022 19:00	Estádio do Dragão	Porto	Club Brugge	Group B	0 - 4
22	2	13/09/2022 19:00	BayArena	Leverkusen	Atlético	Group B	2 - 0
23	2	13/09/2022 19:00	Fußball Arena München	Bayern	Barcelona	Group C	2 - 0
24	2	13/09/2022 19:00	Stade de Marseille	Marseille	Frankfurt	Group D	0 - 1
25	2	14/09/2022 16:45	Stadio San Siro	Milan	Dinamo Zagreb	Group E	3 - 1
26	2	14/09/2022 16:45	Municipal Stadium of Legia Warszawa	Shakhtar Donetsk	Celtic	Group F	1 - 1
28	2	14/09/2022 19:00	Ibrox Stadium	Rangers	Napoli	Group A	0 - 3

Example of UCL Season Group Stage Match Info(2022/23)

Country	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Spain	106.998	103.569	102.283	97.855	96.141	92.998
England	79.605	85.462	90.462	100.569	106.641	109.57
Germany	71.427	71.927	74.784	73.57	75.213	82.481
Italy	76.249	74.725	70.653	75.438	76.902	81.926
Portugal	47.248	48.232	49.449	48.549	53.382	56.216
France	56.415	58.498	59.248	56.081	60.081	61.164
Russia	53.382	50.549	45.449	38.382	34.482	26.215
Ukraine	41.133	38.9	36.1	33.1	31.8	29.5
Belgium	38.5	39.9	37.9	36.5	30.6	42.2
Netherlands	29.749	32.433	35.75	39.2	49.3	59.9
Türkiye	35.8	34.6	33.6	30.1	27.1	32.1
Switzerland	30.2	26.9	26.4	26.225	29.675	31.375
Czechia	30.175	28.675	27.3	26.6	27.8	29.05
Austria	32.85	31.25	32.925	35.825	38.85	34
Scotland	18.625	22.125	27.875	33.375	36.9	36.4

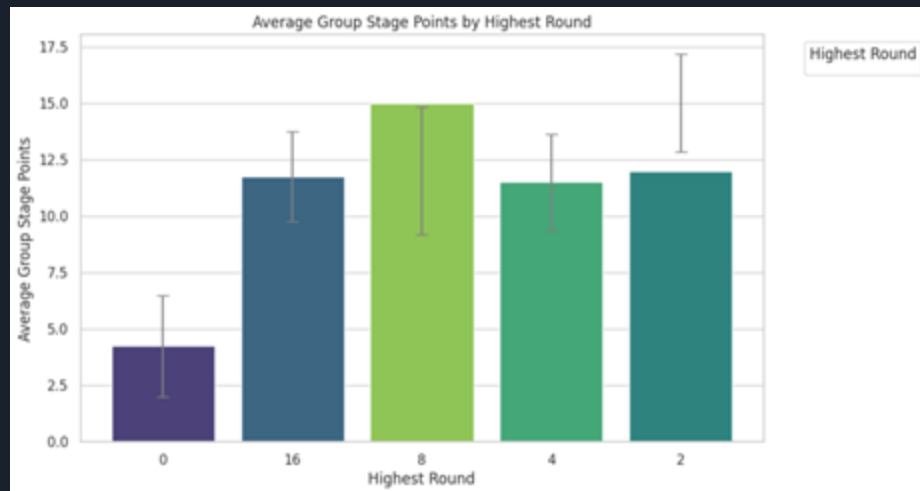
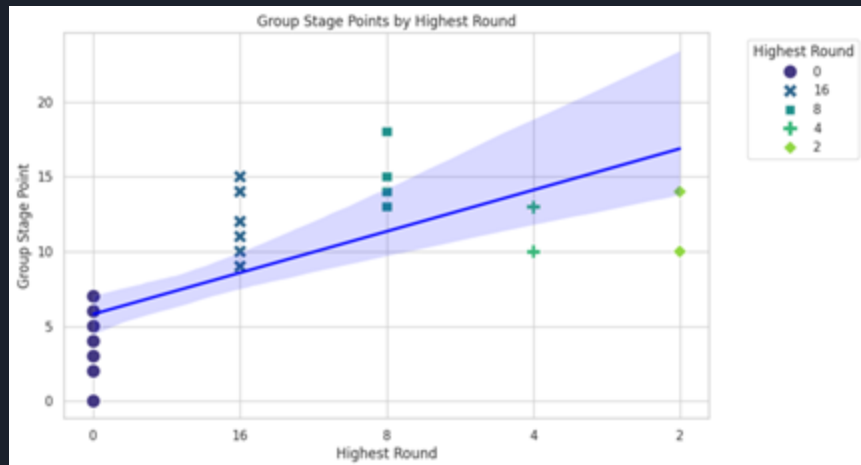
UEFA League Ranking from 2017 to 2022 season

Rank	Club	Played	Win	Draw	Lost	GF	GA	GD	Points	Form	More
1	Arsenal	17	14	2	1	40	14	26	44	W W W W W	▼
2	Manchester City	17	12	3	2	45	16	29	39	W D W W W	▼
3	Newcastle United	18	9	6	3	32	21	11	33	W D W D W	▼
4	Manchester United	17	11	2	4	27	20	7	35	W D W W W	▼
5	Tottenham Hotspur	18	10	3	5	37	25	12	33	W D W D W	▼
6	Fulham	18	9	4	5	32	26	6	31	W D W W W	▼
7	Liverpool	17	8	4	5	34	22	12	28	W D W W W	▼
8	Brighton And Hove Albion	17	8	3	6	32	25	7	27	W D W D W	▼

Example of EPL Half of the 2022 Season League Table



# VISUALIZATION





# Brief observation from Analysis

1. Only group stage performance  $\Rightarrow$  Hard to see the relationship
1. Look at league performance(only the half of the season) and group stage performance together.
3. t-test & ANOVA tables  $\Rightarrow$  Regression models  $\Rightarrow$  Correlation between performance of the first half season and champion

