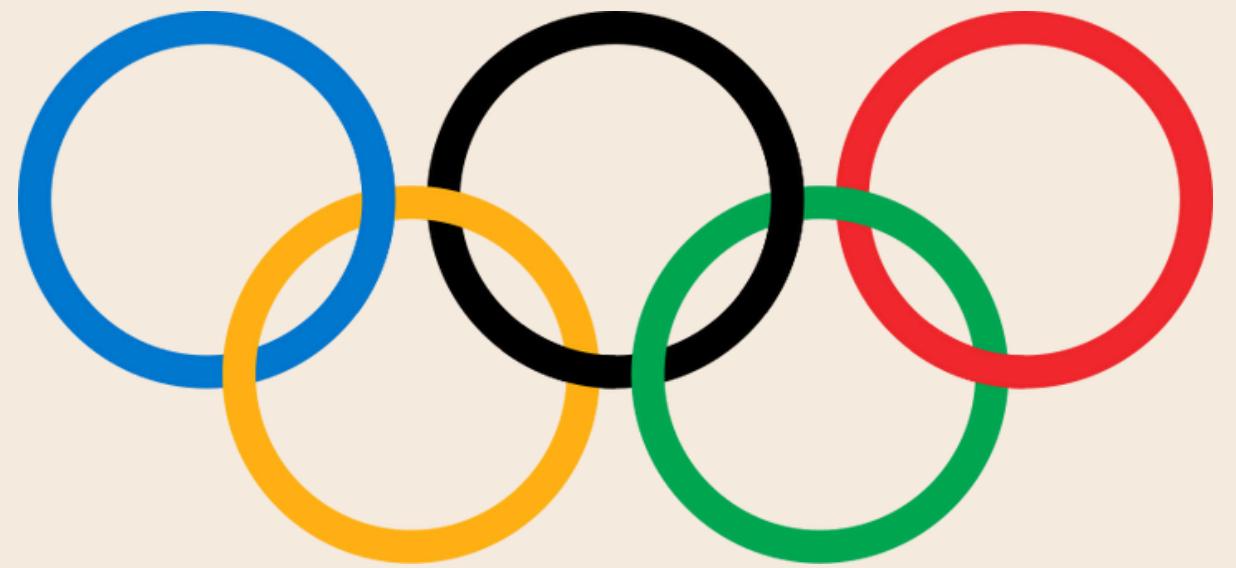


OLYMPIC MEDALS ANALYSIS

Project done by:
Clara, Fritzi, Owen, Tung, Victor



PROJECT OVERVIEW

- Two datasets about the Olympics: Paris 2024 and over 120 years of the Olympics (from 1896 to 2022).
- We decided only to use data from 1920 onwards to have more consistent country names.

**DO COUNTRIES PERFORM
BETTER WHEN THEY ARE
HOSTING THE OLYMPICS?**

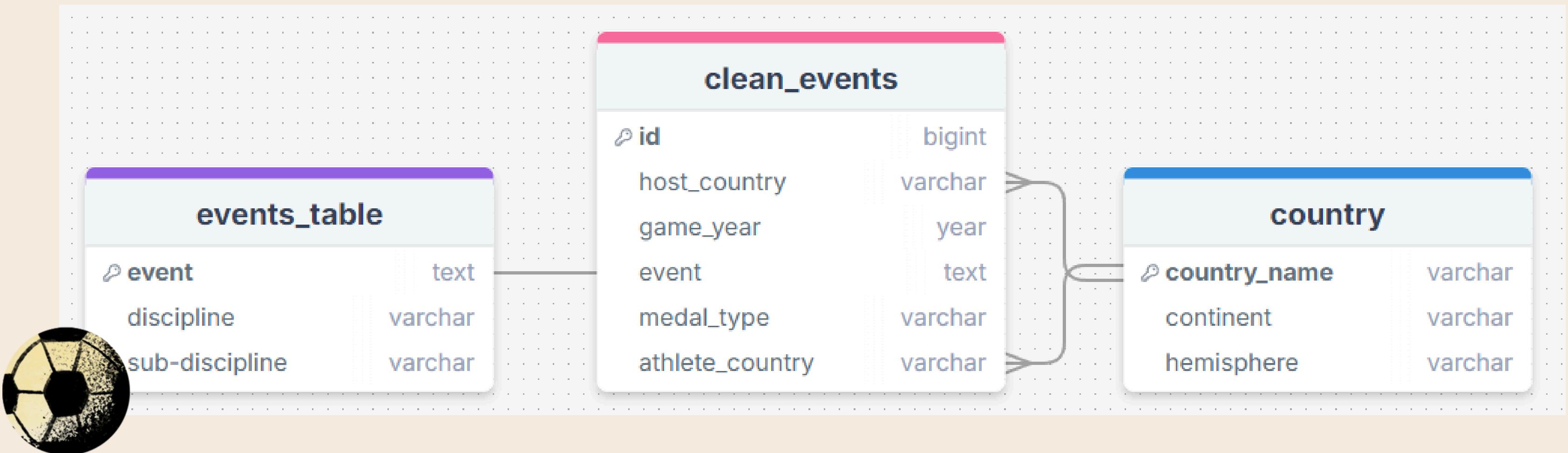


DATABASE DESIGN & DATA TRANSFORMATION

INCONSISTENCIES IN THE DATA

- Country names were inconsistent due to political and economic changes and had to be standardized
- The team events had medals for each team member

ENTITY RELATIONSHIP DIAGRAM



SQL INSIGHTS & ADVANCED ANALYSIS

host_country	game_year	medals_won	percentage_of_total
belgium	1920	36	8.22
france	1924	38	10.05
netherlands	1928	19	5.86
usa	1932	103	29.77
germany	1936	84	22.70
great britain	1948	23	5.60
finland	1952	20	4.47
australia	1956	35	7.78
italy	1960	36	7.81
japan	1964	29	5.75
mexico	1968	9	1.71
federal repu...	1972	40	6.68
canada	1976	11	1.79
usa	1984	174	25.29
south korea	1988	33	4.48
spain	1992	22	2.72
usa	1996	101	12.00
australia	2000	58	6.26
greece	2004	16	1.73
china	2008	100	10.45
great britain	2012	65	6.79
brazil	2016	19	1.95
japan	2020	58	5.38

Performance of host country in comparison by:

- total medals
- medal by gold/silver/bronze



	host_country	game_year	medal_type	medals_won	percentage_of_total
▶	belgium	1920	bronze	11	8.09
	belgium	1920	gold	14	9.03
	belgium	1920	silver	11	7.48
	france	1924	bronze	10	8.00
	france	1924	gold	13	10.32
	france	1924	silver	15	11.81
	netherlands	1928	bronze	4	3.70
	netherlands	1928	gold	6	5.50
	netherlands	1928	silver	9	8.41
	usa	1932	bronze	30	26.32
	usa	1932	gold	41	35.34
	usa	1932	silver	32	27.59
	germany	1936	bronze	29	23.39
	germany	1936	gold	31	25.00
	germany	1936	silver	24	19.67
	great britain	1948	bronze	6	4.35
	great britain	1948	gold	3	2.17
	great britain	1948	silver	14	10.37
	finland	1952	bronze	13	8.44
	finland	1952	gold	4	2.76
	finland	1952	silver	3	2.03
	australia	1956	bronze	14	8.97
	australia	1956	gold	13	8.84

Goal: create table to compare performance of host country in certain interval

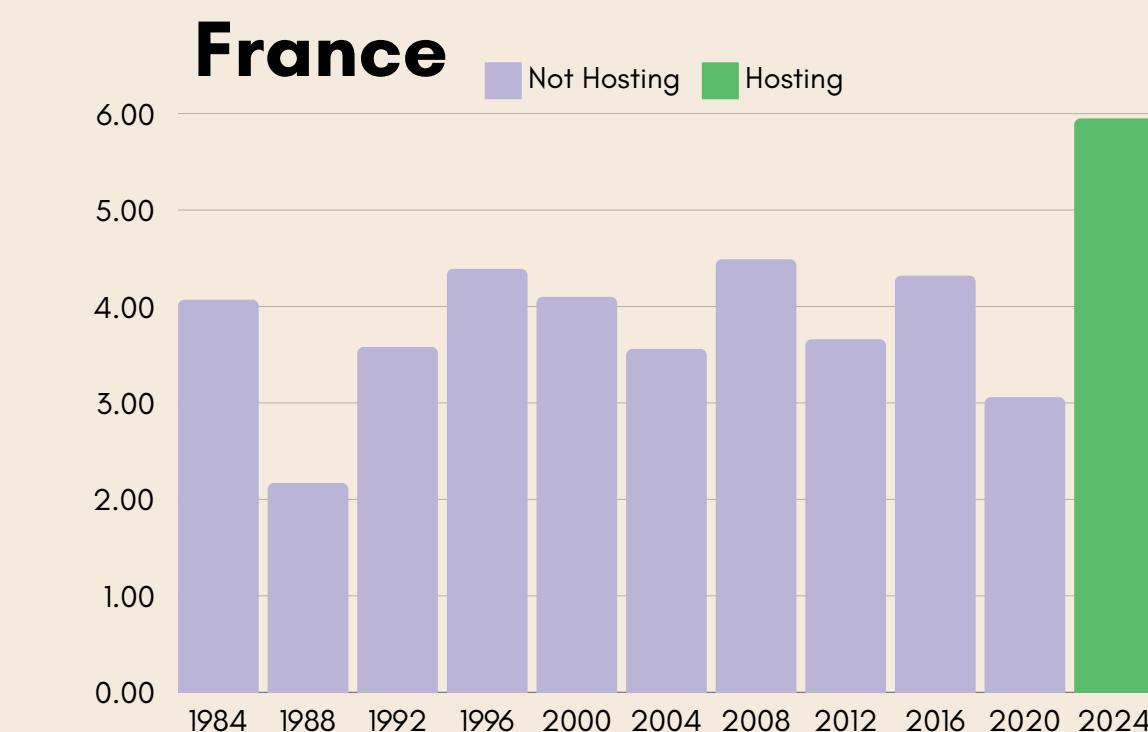
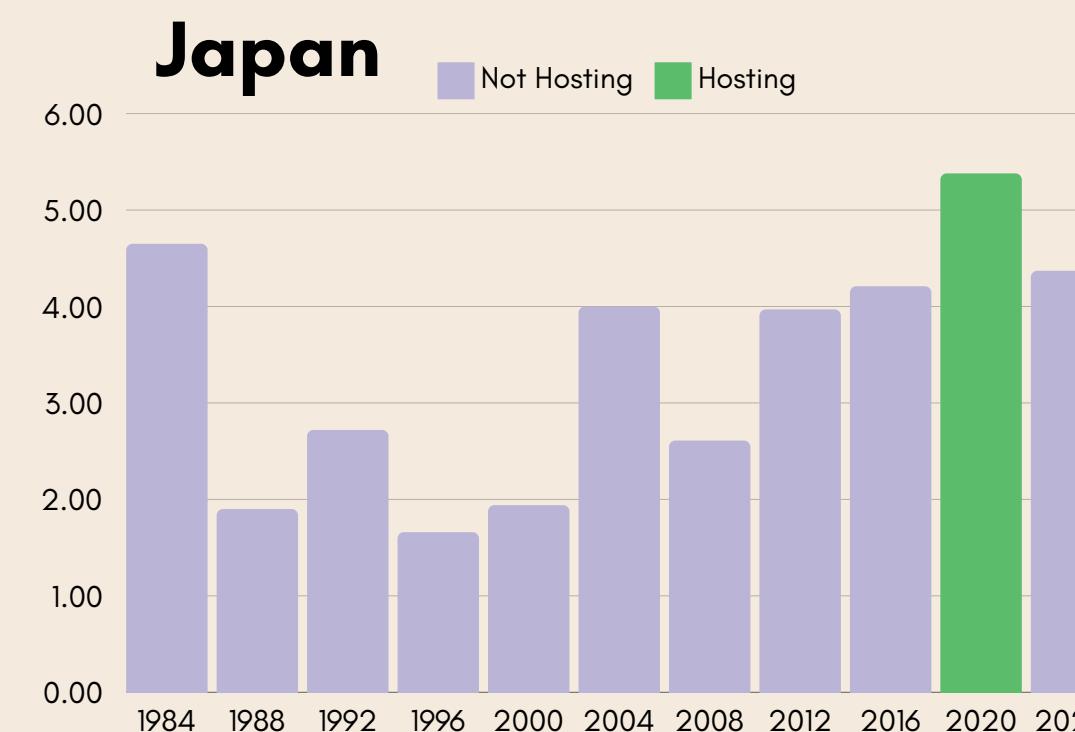
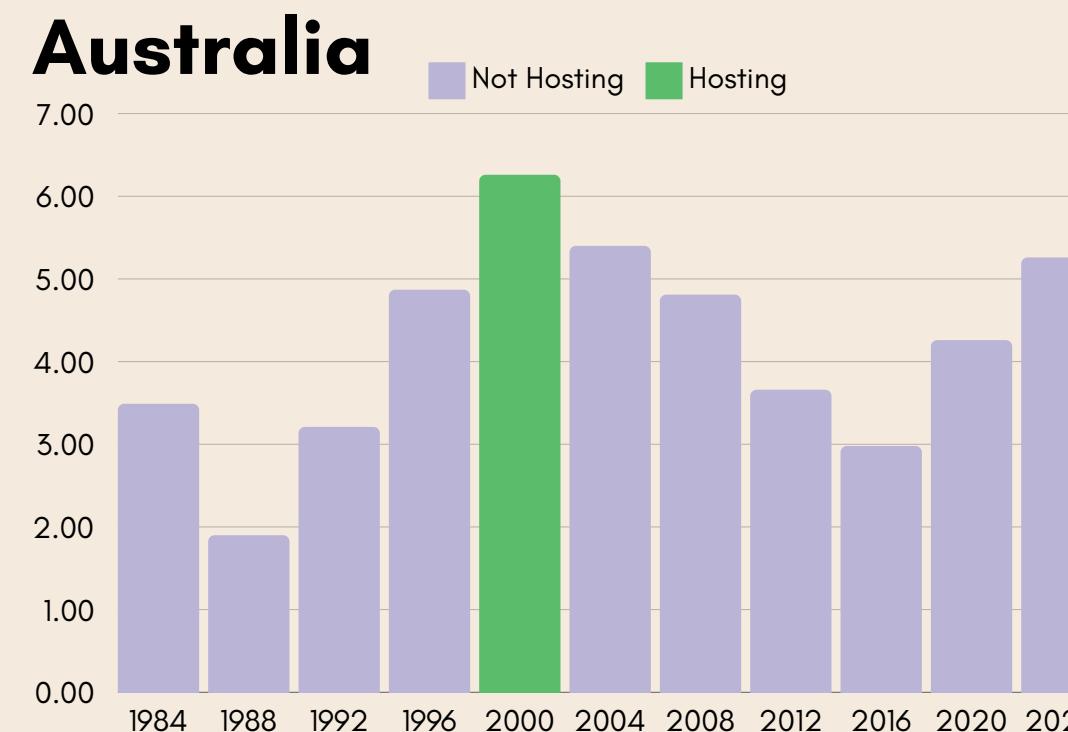
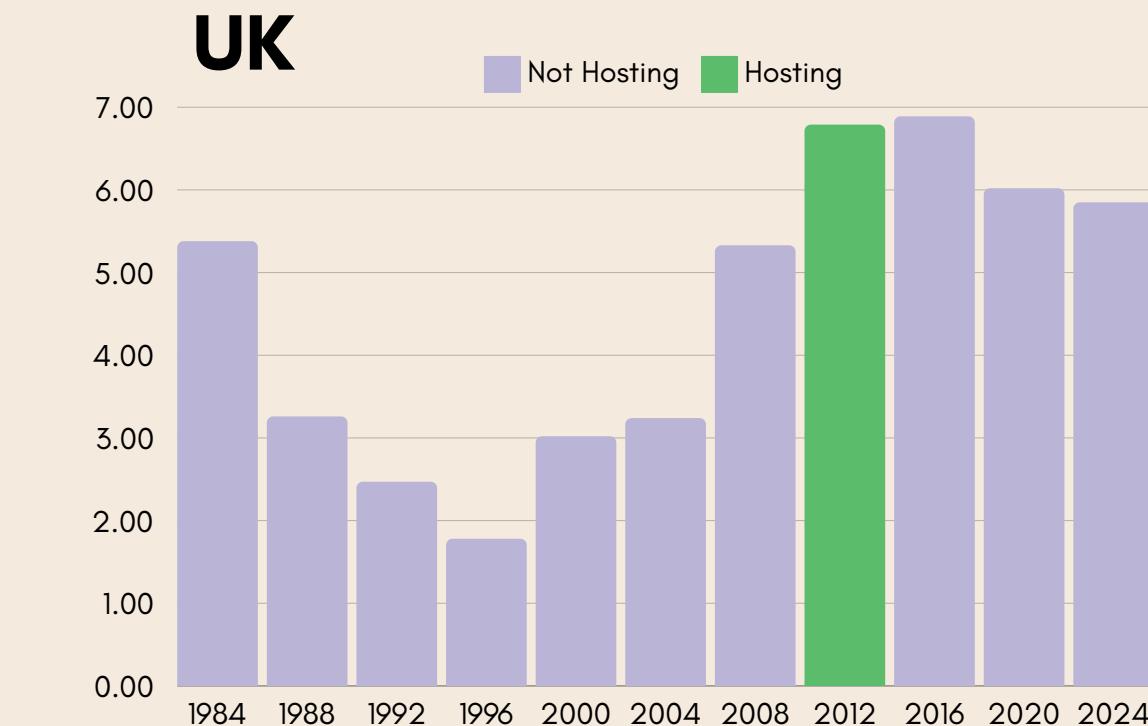
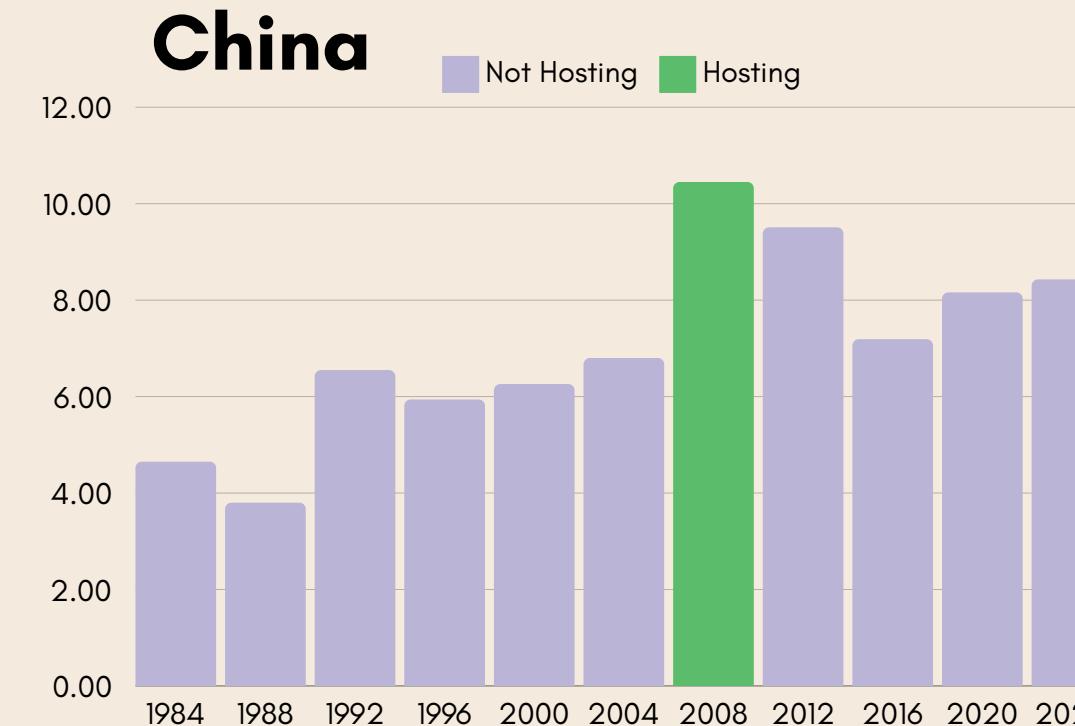
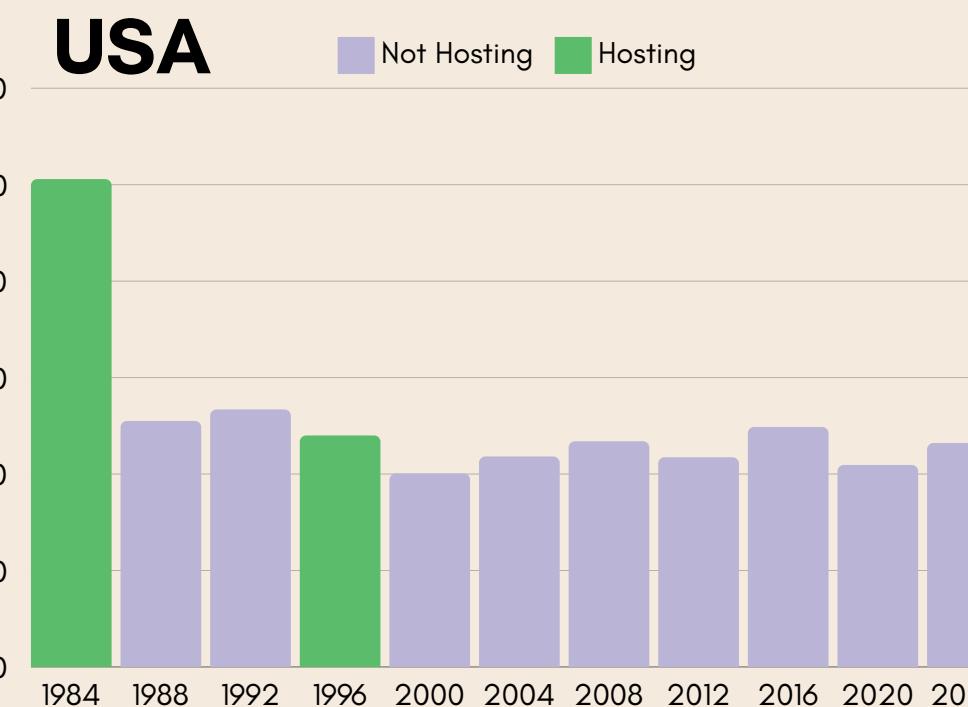
- A lot of null values
- Learning the partition and lag and lead functions later in the week
- Couldn't make this work

SQL INSIGHTS & ADVANCED ANALYSIS

host_country	game_year	medal_type	medals_won	percentage_of_total	prev_medals_won_1	prev_medals_won_2	prev_medals_won_3	prev_medals_won_4	next_medals_won_1	next_medals_won_2	next_medals_won_3	next_medals_won_4	diff_from_prev_1	diff_from_prev_2	diff_from_prev_3	diff_from_prev_4	diff_from_next_1	diff_from_next_2	diff_from_next_3	diff_from_next_4
belgium	1920	bronze	11	8.09	NULL	11	11	11	11	11	11	11	11							
belgium	1920	gold	14	9.03	NULL	14	14	14	14	14	14	14	14							
belgium	1920	silver	11	7.48	NULL	11	11	11	11	11	11	11	11							
france	1924	bronze	10	8.00	NULL	NULL	NULL	NULL	20	NULL	NULL	NULL	10	10	10	10	-10	10	10	10
france	1924	gold	13	10.32	NULL	NULL	NULL	NULL	16	NULL	NULL	NULL	13	13	13	13	-3	13	13	13
france	1924	silver	15	11.81	NULL	NULL	NULL	NULL	24	NULL	NULL	NULL	15	15	15	15	-9	15	15	15
netherlands	1928	bronze	4	3.70	NULL	4	4	4	4	4	4	4	4							
netherlands	1928	gold	6	5.50	NULL	6	6	6	6	6	6	6	6							
netherlands	1928	silver	9	8.41	NULL	9	9	9	9	9	9	9	9							
usa	1932	bronze	30	26.32	NULL	NULL	NULL	NULL	30	25	NULL	NULL	30	30	30	30	0	5	30	30
usa	1932	gold	41	35.34	NULL	NULL	NULL	NULL	83	44	NULL	NULL	41	41	41	41	-42	-3	41	41
usa	1932	silver	32	27.59	NULL	NULL	NULL	NULL	61	32	NULL	NULL	32	32	32	32	-29	0	32	32
germany	1936	bronze	29	23.39	NULL	29	29	29	29	29	29	29	29							
germany	1936	gold	31	25.00	NULL	31	31	31	31	31	31	31	31							
germany	1936	silver	24	19.67	NULL	24	24	24	24	24	24	24	24							
great britain	1948	bronze	6	4.35	NULL	NULL	NULL	NULL	18	NULL	NULL	NULL	6	6	6	6	-12	6	6	6
great britain	1948	gold	3	2.17	NULL	NULL	NULL	NULL	29	NULL	NULL	NULL	3	3	3	3	-26	3	3	3
great britain	1948	silver	14	10.37	NULL	NULL	NULL	NULL	18	NULL	NULL	NULL	14	14	14	14	-4	14	14	14
finland	1952	bronze	13	8.44	NULL	13	13	13	13	13	13	13	13							
finland	1952	gold	4	2.76	NULL	4	4	4	4	4	4	4	4							
finland	1952	silver	3	2.03	NULL	3	3	3	3	3	3	3	3							
australia	1956	bronze	14	8.97	NULL	NULL	NULL	NULL	17	NULL	NULL	NULL	14	14	14	14	-3	14	14	14
australia	1956	gold	13	8.84	NULL	NULL	NULL	NULL	16	NULL	NULL	NULL	13	13	13	13	-3	13	13	13
australia	1956	silver	8	5.44	NULL	NULL	NULL	NULL	25	NULL	NULL	NULL	8	8	8	8	-17	8	8	8
italy	1960	bronze	13	8.13	NULL	13	13	13	13	13	13	13	13							
italy	1960	gold	13	8.55	NULL	13	13	13	13	13	13	13	13							
italy	1960	silver	10	6.71	NULL	10	10	10	10	10	10	10	10							
japan	1964	bronze	8	4.60	NULL	NULL	NULL	NULL	17	NULL	NULL	NULL	8	8	8	8	-9	8	8	8
japan	1964	gold	16	9.82	NULL	NULL	NULL	NULL	27	NULL	NULL	NULL	16	16	16	16	-11	16	16	16
japan	1964	silver	5	2.99	NULL	NULL	NULL	NULL	14	NULL	NULL	NULL	5	5	5	5	-9	5	5	5
mexico	1968	bronze	3	1.64	NULL	3	3	3	3	3	3	3	3							
mexico	1968	gold	3	1.72	NULL	3	3	3	3	3	3	3	3							
mexico	1968	silver	3	1.76	NULL	3	3	3	3	3	3	3	3							
federal repu...	1972	bronze	16	7.66	NULL	16	16	16	16	16	16	16	16							
federal repu...	1972	gold	13	6.67	NULL	13	13	13	13	13	13	13	13							
federal repu...	1972	silver	11	5.64	NULL	11	11	11	11	11	11	11	11							
canada	1976	bronze	6	2.78	NULL	6	6	6	6	6	6	6	6							
canada	1976	silver	5	2.51	NULL	5	5	5	5	5	5	5	5							
usa	1984	bronze	30	12.35	30	NULL	NULL	NULL	25	NULL	NULL	NULL	0	30	30	30	5	30	30	30

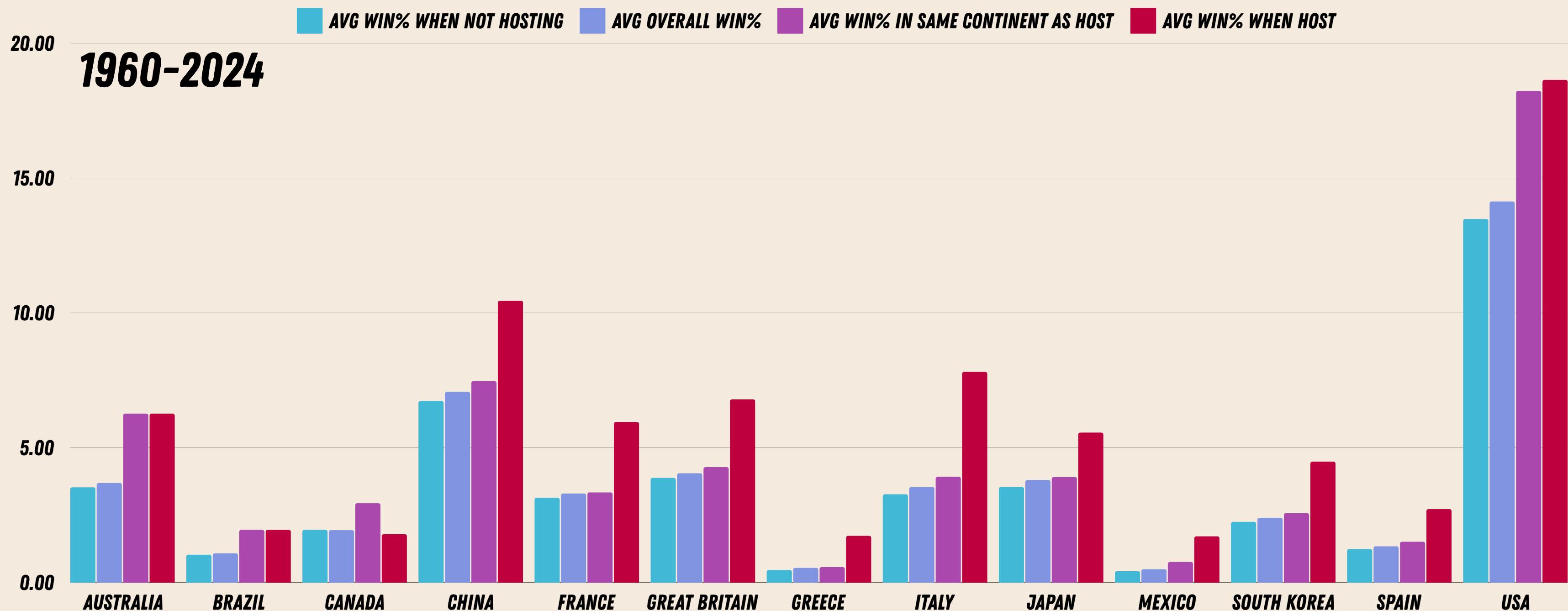
VISUALIZATION & KEY INSIGHTS

Focusing on 1984 onwards, host countries see clear benefit in share of medals won



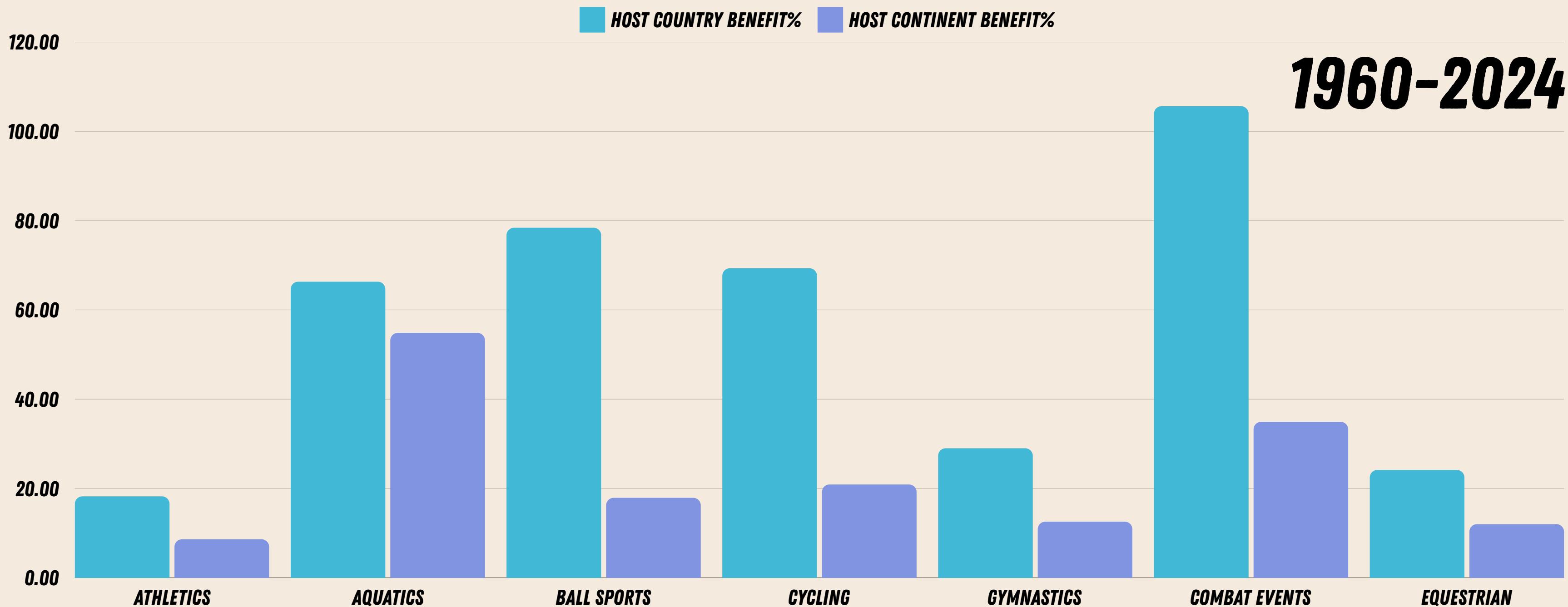
VISUALIZATION & KEY INSIGHTS

- From 1960 Host countries won double (+101%) as many medals as in other years
- Hosts in same continent also gave a 33% increase in medals won.
- This trend was also true for gold medals, although only with an 18% improvement



VISUALIZATION & KEY INSIGHTS

- Hosting provides clear benefit to medals won across all major disciplines.
- Biggest increases are seen for more niche events such as combat event, whereas more established events, such as athletics and gymnastics, see minor benefit



CONCLUSIONS & IMPLICATIONS

- Plots and data support initial hypothesis that being a host country would boost performance
- Countries might invest more in sports when they are hosting or in the host's continent
- Countries might bid heavily over host position

FURTHER RESEARCH

If we had the time, we would probably try to research the tourism implications of hosting the Olympics and other concepts that we had initially discussed.



MAJOR OBSTACLES

- Connecting our hypothesis and work to mySQL – couldn't understand why we were using it besides practicing what we had learned this week
- Hard to navigate with 5 people
- Workload similar to last week's but with less time



THANK YOU!
ANY QUESTIONS OR COMMENTS?