Video games are big business: the global gaming market is projected to be worth more than $300 billion by 2027 according to Mordor Intelligence. With so much money at stake, the major game publishers are hugely incentivized to create the next big hit. But are games getting better, or has the golden age of video games already passed?

In this project, you'll analyze video game critic and user scores as well as sales data for the top 400 video games released since 1977. You'll search for a golden age of video games by identifying release years that users and critics liked best, and you'll explore the business side of gaming by looking at game sales data.

Your search will involve joining datasets and comparing results with set theory. You'll also filter, group, and order data. Make sure you brush up on these skills before trying this project! The database contains two tables. Each table has been limited to 400 rows for this project, but you can find the complete dataset with over 13,000 games on Kaggle.

`game_sales` table

Column	Definition	Data Type
name	Name of the video game	`varchar`
platform	Gaming platform	`varchar`
publisher	Game publisher	`varchar`
developer	Game developer	`varchar`
games_sold	Number of copies sold (millions)	`float`
year	Release year	`int`

`reviews` table

Column	Definition	Data Type
name	Name of the video game	`varchar`
critic_score	Critic score according to Metacritic	`float`
user_score	User score according to Metacritic	`float`

`users_avg_year_rating` table

Column	Definition	Data Type
year	Release year of the games reviewed	`int`
num_games	Number of games released that year	`int`
avg_user_score	Average score of all the games ratings for the year	`float`

`critics_avg_year_rating` **table**

Column	Definition	Data Type
year	Release year of the games reviewed	`int`
num_games	Number of games released that year	`int`
avg_critic_score	Average score of all the games ratings for the year	`float`

```
-- best_selling_games
SELECT *
FROM public.game_sales
ORDER BY public.game_sales.games_sold DESC
LIMIT 10;
```

	name	platform	publisher	developer	games_sold	year
0	Wii Sports for Wii	Wii	Nintendo	Nintendo EAD	82.9	2006
1	Super Mario Bros. for NES	NES	Nintendo	Nintendo EAD	40.24	1985
2	Counter-Strike: Global Offensive for PC	PC	Valve	Valve Corporation	40	2012
3	Mario Kart Wii for Wii	Wii	Nintendo	Nintendo EAD	37.32	2008
4	PLAYERUNKNOWN'S BATTLEGROUNDS for PC	PC	PUBG Corporation	PUBG Corporation	36.6	2017
5	Minecraft for PC	PC	Mojang	Mojang AB	33.15	2010
6	Wii Sports Resort for Wii	Wii	Nintendo	Nintendo EAD	33.13	2009
7	Pokemon Red / Green / Blue Version for GB	GB	Nintendo	Game Freak	31.38	1998
8	New Super Mario Bros. for DS	DS	Nintendo	Nintendo EAD	30.8	2006
9	New Super Mario Bros. Wii for Wii	Wii	Nintendo	Nintendo EAD	30.3	2009

10 rows

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```
-- critics_top_ten_years
SELECT year, num_games, ROUND(public.critics_avg_year_rating.avg_critic_score,2) as avg_critic_score
FROM public.critics_avg_year_rating
WHERE num_games >= 4
GROUP BY year
ORDER BY 3 DESC
LIMIT 10;
```

	year	num_games	avg_critic_score
0	1998	10	9.32
1	2004	11	9.03
2	2002	9	8.99
3	1999	11	8.93
4	2001	13	8.82
5	2011	26	8.76
6	2016	13	8.67
7	2013	18	8.66
8	2008	20	8.63
9	2012	12	8.62

10 rows

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```
-- golden_years
SELECT users.year,
    users.num_games ,
    crit.avg_critic_score,
    avg_user_score,
    (users.avg_user_score - crit.avg_critic_score) as diff
FROM public.users_avg_year_rating users
JOIN public.critics_avg_year_rating crit.
 ON users.num_games = crit.num_games AND users.year = crit.year
 WHERE crit.avg_critic_score > 9 OR users.avg_user_score > 9
 ORDER BY users.year ASC;
```

	year	num_games	avg_critic_score	avg_user_score	diff
0	1997	8	7.93	9.5	1.57
1	1998	10	9.32	9.4	0.08
2	2004	11	9.03	8.55	-0.48
3	2008	20	8.63	9.03	0.4
4	2009	20	8.55	9.18	0.63
5	2010	23	8.41	9.24	0.83

6 rows