SQL Case Study



STRANGER THINGS SQL CHALLENGE

- Challenge completed by : Arathi
- Dataset : Stranger Things
- Tools used :My SQL

TABLES USED

- Characters
- Locations
- Events
- Relationships
- Monsters

Questions

- 1. Retrieve the names of the characters?
- 2. Find characters with age greater than 18?
- 3. Find events in Season 2?
- 4. Get details of the 'Mind Flayer' monster?
- 5. Retrieve characters and their associated events?
- 6. Calculate the total number of characters from each hometown?
- 7. Retrieve characters who were involved in events in Season 1 or Season 2?
- 8. Find the top 3 oldest characters?
- 9. Find the average age of characters in Hawkins?
- 10. Rank characters by age in descending order?

1. Retrieve the names of the characters?

select name from Characters

Output

	name
1	Eleven
2	Mike Wheeler
3	Dustin Henderson
4	Lucas Sinclair
5	Will Byers
6	Joyce Byers
7	Jim Hopper
8	Steve Harrington
9	Jonathan Byers
10	Nancy Wheeler

2. Find characters with age greater than 18?

select name, age from characters where age > 18



3. Find events in season 2?

select event_id, event_name, season
from Events
 where season= 2

event_id		
0,011	event_name	season
1 3	Demogorgon Attack on School	2
2 4	The Mind Flayer	2
3 7	The Upside Down	2

4. Get the details of 'Mind Flayer' monster?

select * from Monsters
where name ='mind flayer'

monster_id		type	abilities
1 2	Mind Flayer	Eldritch Horror	Mind control, ability to possess creatures

5. Retrieve characters and their associated events?

select c.name as character_name , e.event_name as
events_name
from Characters c
inner join Relationships r
on c.character_id = r.character1_id
or c.character_id =r.character2_id
inner join Events e
on e.event_id= r.character1_id
or e.event_id = r.character2_id
group by c.name, e.event_name

Dustin Henderson Discovery of Elever The Mind Flayer Eleven Disappearance of Eleven Discovery of Elever Discovery of Elever Discovery of Elever The Upside Down Disappearance of Eleven The Upside Down Disappearance of Eleven The Upside Down Disappearance of Eleven Disappearance of Eleven The Upside Down Disappearance of Eleven Disappearance of Eleven Disappearance of Eleven Disappearance of Eleven Discovery of Eleven Discovery of Eleven Discovery of Eleven Discovery of Eleven Disappearance of Eleven Discovery of Eleven Di		character_name	events_name
3 Dustin Henderson The Mind Flayer 4 Eleven Disappearance of N 5 Eleven Discovery of Elever 6 Eleven The Upside Down 7 Jim Hopper Disappearance of N 8 Jim Hopper The Upside Down 9 Jonathan Byers Search for Barb 10 Joyce Byers Search for Barb 11 Joyce Byers The Mall Battle 12 Lucas Sinclair Demogorgon Attact 13 Lucas Sinclair Russian Conspirate 14 Lucas Sinclair The Mind Flayer 15 Mike Wheeler Demogorgon Attact 16 Mike Wheeler Discovery of Elever 17 Mike Wheeler Discovery of Elever 18 Steve Harrington The Mind Flayer	1	Dustin Henderson	Demogorgon Attack on School
4 Eleven Disappearance of 15 Eleven Discovery of Elever 6 Eleven The Upside Down 7 Jim Hopper Disappearance of 18 Jim Hopper The Upside Down 9 Jonathan Byers Search for Barb 10 Joyce Byers Search for Barb 11 Joyce Byers The Mall Battle 12 Lucas Sinclair Demogorgon Attact 13 Lucas Sinclair Russian Conspirate 14 Lucas Sinclair The Mind Flayer 15 Mike Wheeler Demogorgon Attact 16 Mike Wheeler Disappearance of 17 Mike Wheeler Discovery of Elever 18 Steve Harrington The Mind Flayer 19 Steve 19 Stev	2	Dustin Henderson	Discovery of Eleven
5 Eleven Discovery of Elever 6 Eleven The Upside Down 7 Jim Hopper Disappearance of N 8 Jim Hopper The Upside Down 9 Jonathan Byers Search for Barb 10 Joyce Byers Search for Barb 11 Joyce Byers The Mall Battle 12 Lucas Sinclair Demogorgon Attact 13 Lucas Sinclair Russian Conspiract 14 Lucas Sinclair The Mind Flayer 15 Mike Wheeler Demogorgon Attact 16 Mike Wheeler Disappearance of N 17 Mike Wheeler Discovery of Elever 18 Steve Harrington The Mind Flayer 19 Steve Harrington The Mind Flayer	3	Dustin Henderson	The Mind Flayer
6 Eleven The Upside Down 7 Jim Hopper Disappearance of 1 8 Jim Hopper The Upside Down 9 Jonathan Byers Search for Barb 10 Joyce Byers Search for Barb 11 Joyce Byers The Mall Battle 12 Lucas Sinclair Demogorgon Attact 13 Lucas Sinclair Russian Conspiract 14 Lucas Sinclair The Mind Flayer 15 Mike Wheeler Demogorgon Attact 16 Mike Wheeler Disappearance of 1 17 Mike Wheeler Discovery of Elever 18 Steve Harrington The Mind Flayer 19 Steve Harrington The Mind Flayer	4	Eleven	Disappearance of Will Byers
7 Jim Hopper Disappearance of 18 Jim Hopper The Upside Down 9 Jonathan Byers Search for Barb 10 Joyce Byers Search for Barb 11 Joyce Byers The Mall Battle 12 Lucas Sinclair Demogorgon Attact 13 Lucas Sinclair Russian Conspiract 14 Lucas Sinclair The Mind Flayer 15 Mike Wheeler Demogorgon Attact 16 Mike Wheeler Disappearance of 17 Mike Wheeler Discovery of Elever 18 Steve Harrington The Mind Flayer 19 Steve Harrington The Mind Flayer	5	Eleven	Discovery of Eleven
8 Jim Hopper The Upside Down 9 Jonathan Byers Search for Barb 10 Joyce Byers Search for Barb 11 Joyce Byers The Mall Battle 12 Lucas Sinclair Demogorgon Attact 13 Lucas Sinclair Russian Conspiract 14 Lucas Sinclair The Mind Flayer 15 Mike Wheeler Demogorgon Attact 16 Mike Wheeler Disappearance of Mike Wheeler Discovery of Elever 17 Mike Wheeler Discovery of Elever 18 Steve Harrington Russian Conspiract 19 Steve Harrington The Mind Flayer	6	Eleven	The Upside Down
9 Jonathan Byers Search for Barb 10 Joyce Byers Search for Barb 11 Joyce Byers The Mall Battle 12 Lucas Sinclair Demogorgon Attac 13 Lucas Sinclair Russian Conspirac 14 Lucas Sinclair The Mind Flayer 15 Mike Wheeler Demogorgon Attac 16 Mike Wheeler Disappearance of Mike Wheeler Discovery of Elever 17 Mike Wheeler Discovery of Elever 18 Steve Harrington Russian Conspirac 19 Steve Harrington The Mind Flayer	7	Jim Hopper	Disappearance of Will Byers
10 Joyce Byers Search for Barb 11 Joyce Byers The Mall Battle 12 Lucas Sinclair Demogorgon Attac 13 Lucas Sinclair Russian Conspirac 14 Lucas Sinclair The Mind Flayer 15 Mike Wheeler Demogorgon Attac 16 Mike Wheeler Disappearance of 17 Mike Wheeler Discovery of Elever 18 Steve Harrington Russian Conspirac 19 Steve Harrington The Mind Flayer	8	Jim Hopper	The Upside Down
11 Joyce Byers The Mall Battle 12 Lucas Sinclair Demogorgon Attac 13 Lucas Sinclair Russian Conspirac 14 Lucas Sinclair The Mind Flayer 15 Mike Wheeler Demogorgon Attac 16 Mike Wheeler Disappearance of 17 Mike Wheeler Discovery of Elever 18 Steve Harrington Russian Conspirac 19 Steve Harrington The Mind Flayer	9	Jonathan Byers	Search for Barb
12 Lucas Sinclair Demogorgon Attact 13 Lucas Sinclair Russian Conspiract 14 Lucas Sinclair The Mind Flayer 15 Mike Wheeler Demogorgon Attact 16 Mike Wheeler Disappearance of 17 Mike Wheeler Discovery of Elever 18 Steve Harrington Russian Conspiract 19 Steve Harrington The Mind Flayer	10	Joyce Byers	Search for Barb
13 Lucas Sinclair Russian Conspirac 14 Lucas Sinclair The Mind Flayer 15 Mike Wheeler Demogorgon Attac 16 Mike Wheeler Disappearance of 17 Mike Wheeler Discovery of Elever 18 Steve Harrington Russian Conspirac 19 Steve Harrington The Mind Flayer	11	Joyce Byers	The Mall Battle
14 Lucas Sinclair The Mind Flayer 15 Mike Wheeler Demogorgon Attac 16 Mike Wheeler Disappearance of 17 Mike Wheeler Discovery of Elever 18 Steve Harrington Russian Conspirac 19 Steve Harrington The Mind Flayer	12	Lucas Sinclair	Demogorgon Attack on School
15 Mike Wheeler Demogorgon Attac 16 Mike Wheeler Disappearance of V 17 Mike Wheeler Discovery of Elever 18 Steve Harrington Russian Conspirac 19 Steve Harrington The Mind Flayer	13	Lucas Sinclair	Russian Conspiracy
16 Mike Wheeler Disappearance of 1 17 Mike Wheeler Discovery of Elever 18 Steve Harrington Russian Conspirace 19 Steve Harrington The Mind Flayer	14	Lucas Sinclair	The Mind Flayer
17 Mike Wheeler Discovery of Elever 18 Steve Harrington Russian Conspirac 19 Steve Harrington The Mind Flayer	15	Mike Wheeler	Demogorgon Attack on School
18 Steve Harrington Russian Conspirac 19 Steve Harrington The Mind Flayer	16	Mike Wheeler	Disappearance of Will Byers
19 Steve Harrington The Mind Flayer	17	Mike Wheeler	Discovery of Eleven
-	18	Steve Harrington	Russian Conspiracy
20 Will Byers Search for Barb	19	Steve Harrington	The Mind Flayer
	20	Will Byers	Search for Barb
21 Will Byers The Mall Battle	21	Will Byers	The Mall Battle

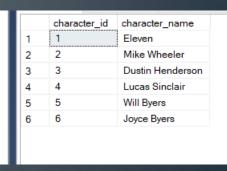
6. Calculate the total number of characters from each home town?

select hometown,count(character_id) as total_characters from characters group by hometown



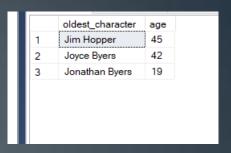
7. Retrieve characters who were involved in events in season 1 or season 2?

```
select distinct(c.character_id),c.name as
character_name
from Characters c
join Relationships r
on c.character_id = r.character1_id
or c.character_id = r.character1_id
join Events e
on e.event_id = r.character1_id or e.event_id =
r.character2_id
where e.season in (1,2)
order by character_id asc
```



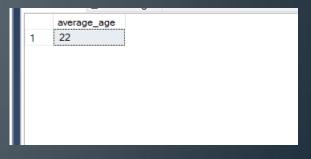
8. Find the top 3 oldest characters?

select top 3 name as oldest_character, age from Characters order by age desc



9. Find the average age of characters in hawkins?

select avg(age) as average_age
from Characters
where hometown = 'hawkins'



10. Rank Characters by age in descending order?

select name as character_name, age ,
rank() over(order by age desc) as rnk
from Characters

1 Jim Hopper 45 1 2 Joyce Byers 42 2 3 Jonathan Byers 19 3 4 Steve Harrington 18 4 5 Nancy Wheeler 17 5 6 Mike Wheeler 16 6 7 Dustin Henderson 16 6 8 Lucas Sinclair 16 6 9 Will Byers 16 6 10 Eleven 15 10		character_name	age	rnk
3 Jonathan Byers 19 3 4 Steve Harrington 18 4 5 Nancy Wheeler 17 5 6 Mike Wheeler 16 6 7 Dustin Henderson 16 6 8 Lucas Sinclair 16 6 9 Will Byers 16 6	1	Jim Hopper	45	1
4 Steve Harrington 18 4 5 Nancy Wheeler 17 5 6 Mike Wheeler 16 6 7 Dustin Henderson 16 6 8 Lucas Sinclair 16 6 9 Will Byers 16 6	2	Joyce Byers	42	2
5 Nancy Wheeler 17 5 6 Mike Wheeler 16 6 7 Dustin Henderson 16 6 8 Lucas Sinclair 16 6 9 Will Byers 16 6	3	Jonathan Byers	19	3
6 Mike Wheeler 16 6 7 Dustin Henderson 16 6 8 Lucas Sinclair 16 6 9 Will Byers 16 6	4	Steve Harrington	18	4
7 Dustin Henderson 16 6 8 Lucas Sinclair 16 6 9 Will Byers 16 6	5	Nancy Wheeler	17	5
8 Lucas Sinclair 16 6 9 Will Byers 16 6	6	Mike Wheeler	16	6
9 Will Byers 16 6	7	Dustin Henderson	16	6
	8	Lucas Sinclair	16	6
10 Eleven 15 10	9	Will Byers	16	6
	10	Eleven	15	10