

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
```

	name	age
1	Joyce Byers	42
2	Jim Hopper	45
3	Jonathan Byers	19

3. Find events in season 2?

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

	event_id	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	name	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
```

	character_name	events_name
1	Dustin Henderson	Demogorgon Attack on School
2	Dustin Henderson	Discovery of Eleven
3	Dustin Henderson	The Mind Flayer
4	Eleven	Disappearance of Will Byers
5	Eleven	Discovery of Eleven
6	Eleven	The Upside Down
7	Jim Hopper	Disappearance of Will Byers
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 Attack on School
13	Lucas Sinclair	Russian Conspiracy
14	Lucas Sinclair	The Mind Flayer
15	Mike Wheeler	Demogorgon Attack on School
16	Mike Wheeler	Disappearance of Will Byers
17	Mike Wheeler	Discovery of Eleven
18	Steve Harrington	Russian Conspiracy
19	Steve Harrington	The Mind Flayer
20	Will Byers	Search for Barb
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
```

	hometown	total_characters
1	Hawkins	10

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.character2_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
```

	character_id	character_name
1	1	Eleven
2	2	Mike Wheeler
3	3	Dustin Henderson
4	4	Lucas Sinclair
5	5	Will Byers
6	6	Joyce Byers

8. Find the top 3 oldest characters?

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

	oldest_character	age
1	Jim Hopper	45
2	Joyce Byers	42
3	Jonathan Byers	19

9. Find the average age of characters in hawkins?

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

	average_age
1	22

10. Rank Characters by age in descending order ?

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

	character_name	age	rnk
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