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DBMS database design project

1) Review of the TV series "Breaking Bad":

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introduction:

Breaking Bad Chronicles

In the quiet town of Albuquerque, high school chemistry teacher Walter White has been diagnosed with lung cancer. Faced with unbearable medical bills, Walter made a fateful decision. Together with former student Jesse Pinkman, they began producing the purest form of methamphetamine, known as Blue Meth. Their expertise brought them into the dangerous world of drugs, attracting the attention of law enforcement and ruthless drug dealers.

As Walter sinks deeper into this criminal underworld, he tries to lead a double life as both a family man and the mysterious drug lord 'Heisenberg'. The town descends into chaos as Walter's actions become increasingly cruel and violent. His journey leads him into a dangerous confrontation with drug lord Gustavo Fring, culminating in the explosive "Face Off." Walter White's transformation from ailing professor to infamous drug lord was complete, and the city of Albuquerque was changed forever.

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Reasons for choosing this topic:

For this project, I chose the theme of Breaking Bad because of its broad appeal and cultural impact. - The series deals with serious moral issues and has been praised for its interesting story and character development.

- Provides a rich source of material for database design and SQL practice. Since the show revolves around characters, there are many opportunities to build complex databases with extensive tables and relationships.

By choosing a popular and beloved TV show like Breaking Bad, your project can capture the attention of viewers and increase the popularity of your design and database search. 2) Database design:

The following is an expanded version of the ``Breaking Bad'' series database design.

topic:

1. Character:

-CharacterID (primary key)

- Name

- No more

- Date of birth

- sex

- activity

- explanation

2. episode:

- EpisodeID (primary key)

- Name

- June

- Broadcast date

- explanation

3. Location:

- LocationID (primary key)

- Name

- category

- explanation

4. drugs:

- DrugID (primary key)

- Name

- Chemical formula

- explanation

5. Event:

- EventID (primary key)

- the sun

- explanation

relationship:

One. Character - Appears in the episode

- AppearanceID (primary key)

- CharacterID (foreign key)

- Episode ID (foreign key)

- Role (eg main character, guest appearance)

2. Character – has a job.

- CharacterID (foreign key)

- activity

Three. Characters - by location:

- AssociationID (primary key)

- CharacterID (foreign key)

- LocationID (foreign key)

4. Description - Drug Related:

- contract ID (primary key)

- CharacterID (foreign key)

- DrugID (foreign key)

- Role (eg user, producer)

5. Events - related to characters and episodes:

- EventAssociationID (primary key)

- EventID (foreign key)

- CharacterID (foreign key)

- Episode ID (foreign key)

3) Meal plan:

4) Fake data table:

Excel file: https://docs.google.com/spreadsheets/d/1ZTwxf4Pj9xVB6YLjV4pmqEEn9B2paDXh/edit?usp=sharing&ouid=105449202744850971489&rtpof=true&sd=tr

5) SQL command:

Text file: https://drive.google.com/file/d/1pfxNrRGZIUPS4Izf9b9Uzaijng23qKyA/view?usp=sharing

6) SQL query (query response):

SQL Query 1: Get details about all the characters in the database.

Answer: SELECT \* FROM characters;

SQL Query 2: List of all episodes from season 1. SELECT \* SEASON FROM episodes = 1;

SQL Query 3: Find all characters associated with the location "White Residence".

Answer: SELECT c.FirstName, c.FastName

BY letter c

JOIN CharacterLocation cl ON c.CharacterID = cl.CharacterID

LOCATION JOIN l TO cl.LocationID = l.LocationID

where l.name = \'The White Residence\';

SQL Query 4: Retrieve a list of all events that contain the matching character. Answer: SELECT e.Date, e.Description, c.FirstName, c.LastName

FROM the event e

LEFT JOIN EventAssociation ea ON e.EventID = ea.EventID

LEFT JOIN character c ON ea.CharacterID = c.CharacterID;

SQL Query 5: List all characters and their classes.

Answer: Please select your name, surname and occupation.

Symptoms of OF;

SQL Query 6: Search for Walter White episodes. Answer: Select e.Topic, e.Season.

the episode of e

JOIN CharacterEpisode ce ON e.episodeID = ce.episodeID

JOIN character c ON ce.CharacterID = c.CharacterID

WHERE c.FirstName = \'Walter\' AND c.LastName = \'Alb\';

7) Get information about Walter White's personality, including his date of birth, occupation, and description.

Answer: Select Date of Birth, Occupation and Description.

OF letters

WHERE FirstName = \'Walter\' AND FirstName = \'Alb\';

8) List all the episodes of season 1, focusing on the key moments of Walter's transformation. Answer: Choose a title, air date and description.

OF Episode

true season = 1;

9) As you travel, look for places related to Walter White characters.

Answer: SELECT l.name, l.type, l.description

I'm on the spot

JOIN CharacterLocation cl ON l.LocationID = cl.LocationID

JOIN character c ON cl.CharacterID = c.CharacterID

WHERE c.FirstName = \'Walter\' AND c.LastName = \'Alb\';

10) Get a list of characters and their roles related to Blue Meth. Answer: SELECT c.FirstName, c.LastName, cd.Role

BY letter c

JOIN CharacterDrug cd TO c.CharacterID = cd.CharacterID

JOIN drug d ON cd.DrugID = d.DrugID

WHERE d.Name = \'Blue Met\';

11) Calculate the number of episodes per season to understand the progression of the story.

Answer: SELECT SEASON WHERE COUNT(\*) AS NUMBER OF EPISODES(\*)

episode

TOP by season;

12) Find all the people involved in Walter White's criminal activities. Answer: Option c. Name, c. surname, c. place of work

BY letter c

wherever (

choice 1

OF character episode what

WHERE c.CharacterID = ce.CharacterID

);

13) List and describe events where Walter White's actions had a significant impact.

Answer: SELECT e.Date, e.Description

FROM the event e

wherever (

choice 1

In EventAssociation etc.

JOIN character c ON ea.CharacterID = c.CharacterID

WHERE e.EventID = ea.EventID

AND c.FirstName = \'Walter\' AND c.LastName = \'Alb\'

);

14) List and describe the events that were significantly influenced by Walter White's actions. Answer: SELECT e.Date, e.Description

FROM the event e

wherever (

choice 1

In EventAssociation etc.

JOIN character c ON ea.CharacterID = c.CharacterID

WHERE e.EventID = ea.EventID

AND c.FirstName = \'Walter\' AND c.LastName = \'Alb\'

);

15) List all the people and their associated occupations, showing the diversity of the drug business environment.

SELECT c. last name, c. first name, common occupation

BY letter c

LEFT JOIN CharacterOccupation co ON c.CharacterID = co.CharacterID;

16) Find the season finale episode that shows the culmination of Walter White's transformation. Answer: Choose a title, air date and description.

episode

WHERE season = (SELECT MAX(Season) FROM episode);

17) Take the events chronologically to understand the timeline of the key moments of the event.

Answer: Select date, description

FROM the event

Please order by date.