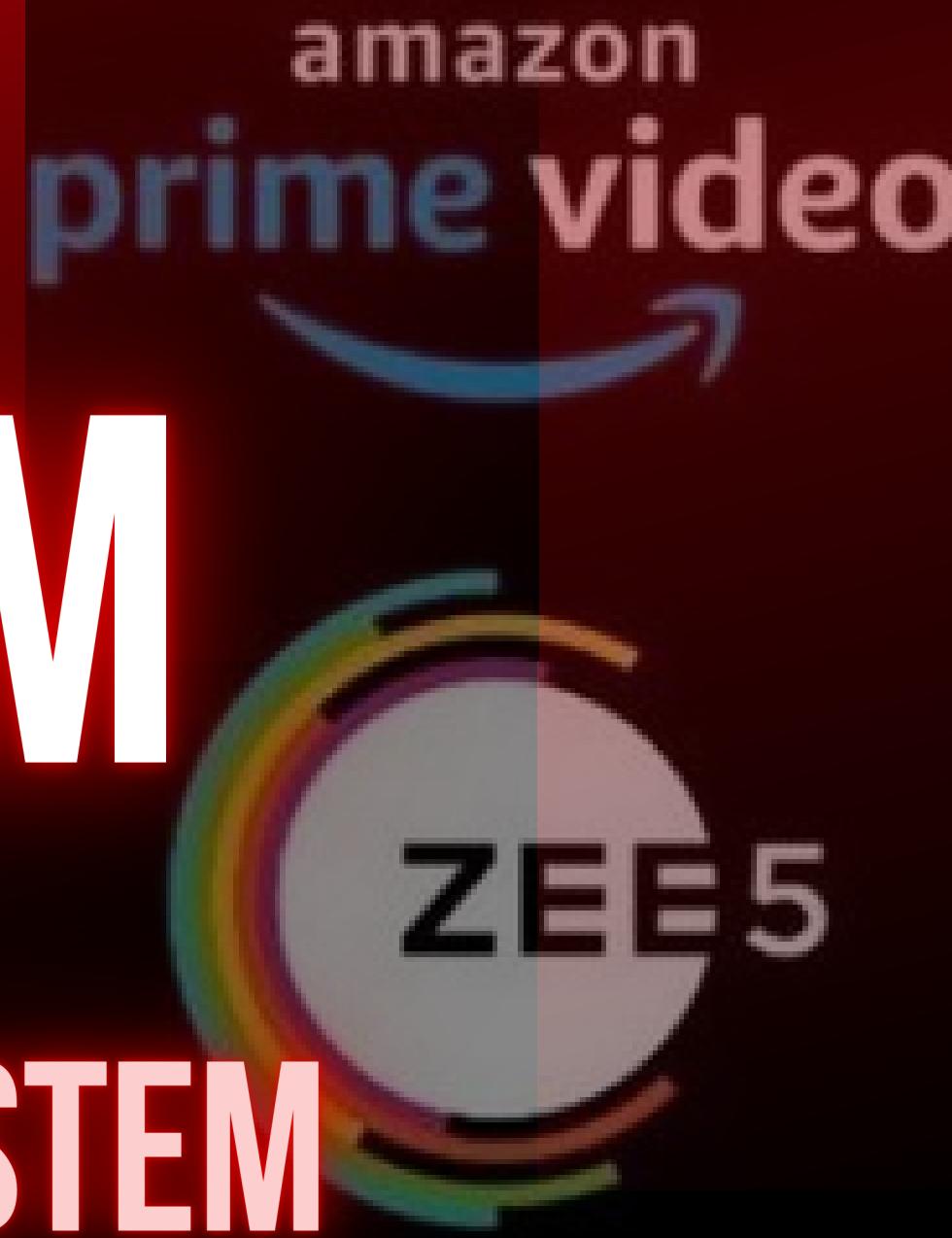


OTT PLATFORM

DATABASE MANAGEMENT SYSTEM



hotstar



MEMBERS

UNDER THE GUIDANCE OF

DR. DEBANJAN SADHYA

• ANKIT MEWADA

2021-IMT-013

• AYUSH JHA

2021-IMT-017

• IPSA BADONIYA

2021-IMT-045

• JOGESH SONI

2021-IMT-046

• MRIDUL GUPTA

2021-IMT-064

• SHALINI KUMARI

2021-IMT-089

CONTENTS

- Introduction
- Entity Relationship Diagram
- Schemas
- Functional Dependencies
- Normalization
- SQL Queries
- Relational Algebra Queries

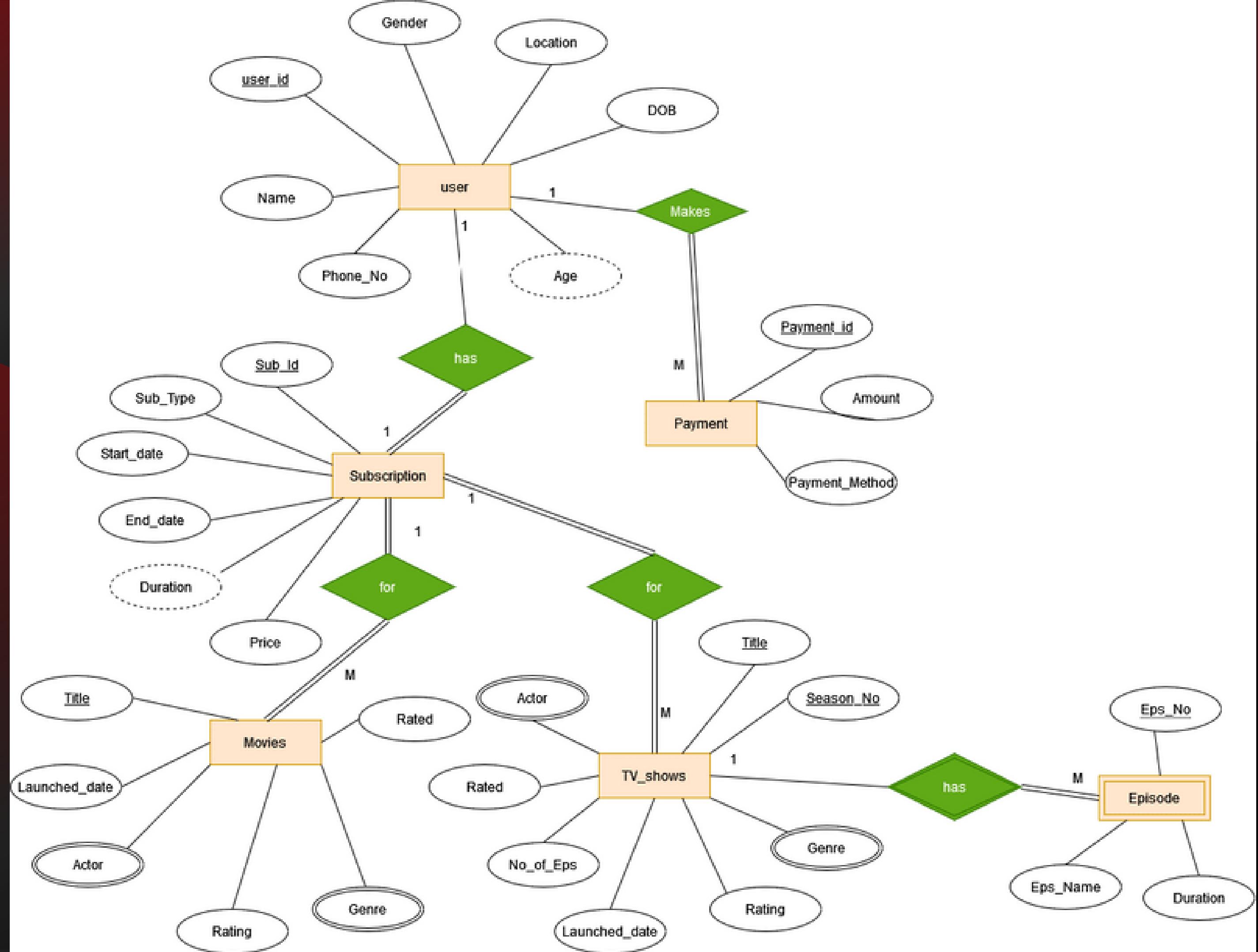
INTRODUCTION

The acronym OTT stands for Over-the-Top. This convenient little term explains the new delivery method of film and TV content over the internet whenever we want, across many different devices, without the need for traditional broadcast, cable or satellite pay-TV providers.

This is an OTT Platform Database management system project which consists of developing of entities and their respective attributes .This approach also includes writing and applying queries as required . After forming initial Entities with their attributes then we proceed with developing ER diagram for given entities in further phase.

This database can handle different requests and provides an output based on entities. The results from this database is used by OTT Platform authorities for better decision making.

ER DIAGRAM



SCHEMAS

user = (user_id, Location, DOB, Name,
Gender, Phone_No, Sub_id)

Subscription = (Sub_id, Sub_Type,
Start_date, End_date, Price,)

Payment = (Payment_id, Amount,
Payment_Method, user_id)

SCHEMAS

Movies = (Title, Launched_date, Rating,
Rated, Sub_id)

Movie_Actor = (Title, Actor)

Movie_Genre = (Title, Genre)

SCHEMAS

TV_shows = (Title, Season No, Genre, Rating,
Launched_date, No_of_Eps, Rated, Sub_id)

TV_shows_Actor = (Title, Season No,
Actor)

SCHEMAS

TV_show_Genre = (Title, Season No,
Genre)

Episode = (Title, Season No, Eps No,
Eps Name, Duration)

FUNCTIONAL DEPENDENCIES

user

$\text{user_id} \rightarrow \text{Name, Location, Age , DOB, Phone_No, Gender}$

$\text{DOB} \rightarrow \text{Age}$

Payment

$\text{Payment_id} \rightarrow \text{Amount, Payment_Method}$

Movie

$\text{Title} \rightarrow \text{Rating, Actor, Rated, Genre, Launched_date}$

FUNCTIONAL DEPENDENCIES

Subscription

Sub_id \rightarrow Sub_Type, Start_date, End_date, Duration, Price
End_Date,Start_date \rightarrow Duration
Sub_Type \rightarrow Price

TV_shows

Title, Season_No \rightarrow Actor, Rated, No_of_Eps,
Launched_date, Rating, Genre
Title \rightarrow Rated

Episode

Eps_No, Title, Season_No \rightarrow Eps_Name,
Duration

NORMALISATION

1. user

user_id -> Name, Location, DOB, Age , Phone_No
DOB -> Age

Candidate key = {user_id}

Prime Attribute = {user_id}

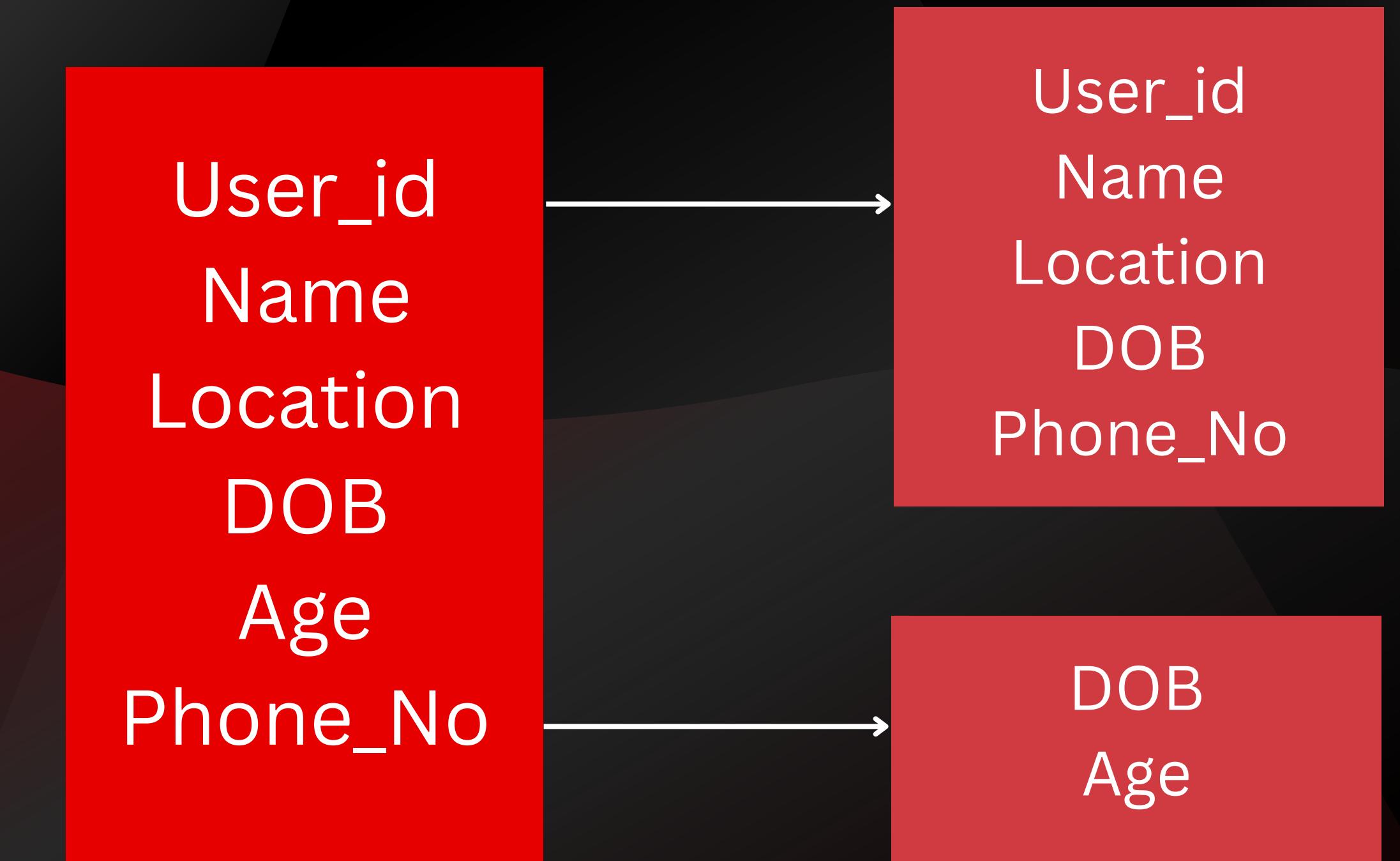
- Since all attribute are in atomic form so, it is in 1NF
- Since there is no partial dependencies it is in 2NF
- Since there is transitive dependency i.e, DOB -> Age

DECOMPOSITION

user1 = (user_id,Name, Location, Phone_No,DOB)

user2 = (DOB, Age)

- Since there is no non-prime attribute defining a prime attribute so it is in BCNF



NORMALISATION

2. Payment

Payment_id \rightarrow Amount, Payment_Method

Candidate key = {Payment_id}

Prime Attribute = {Payment_id}

- Since all attribute are in atomic form so, it is in 1NF
- Since there is no partial dependencies it is in 2NF
- Since there is no transitive dependencies it is in 3NF
- Since there is no non-prime attribute defining a prime attribute so it is in BCNF

Payment_id

Amount

Payment_method

NORMALISATION

3. Subscription

Sub_Id -> Sub_Type, Start_date, End_date, Duration, Price

Sub_Type -> Price

Start_date, End_date -> Duration

Candidate key = {Sub_Id}

Prime Attribute = {Sub_Id}

- Since all attribute are in atomic form so, it is in 1NF
- Since there is no partial dependencies so, it is in 2NF
- Since there is transitive dependencies so , it is not in 3NF i.e,
 - Start_date, End_date -> Duration
 - & Sub_Type -> Price

NORMALISATION

3. Subscription

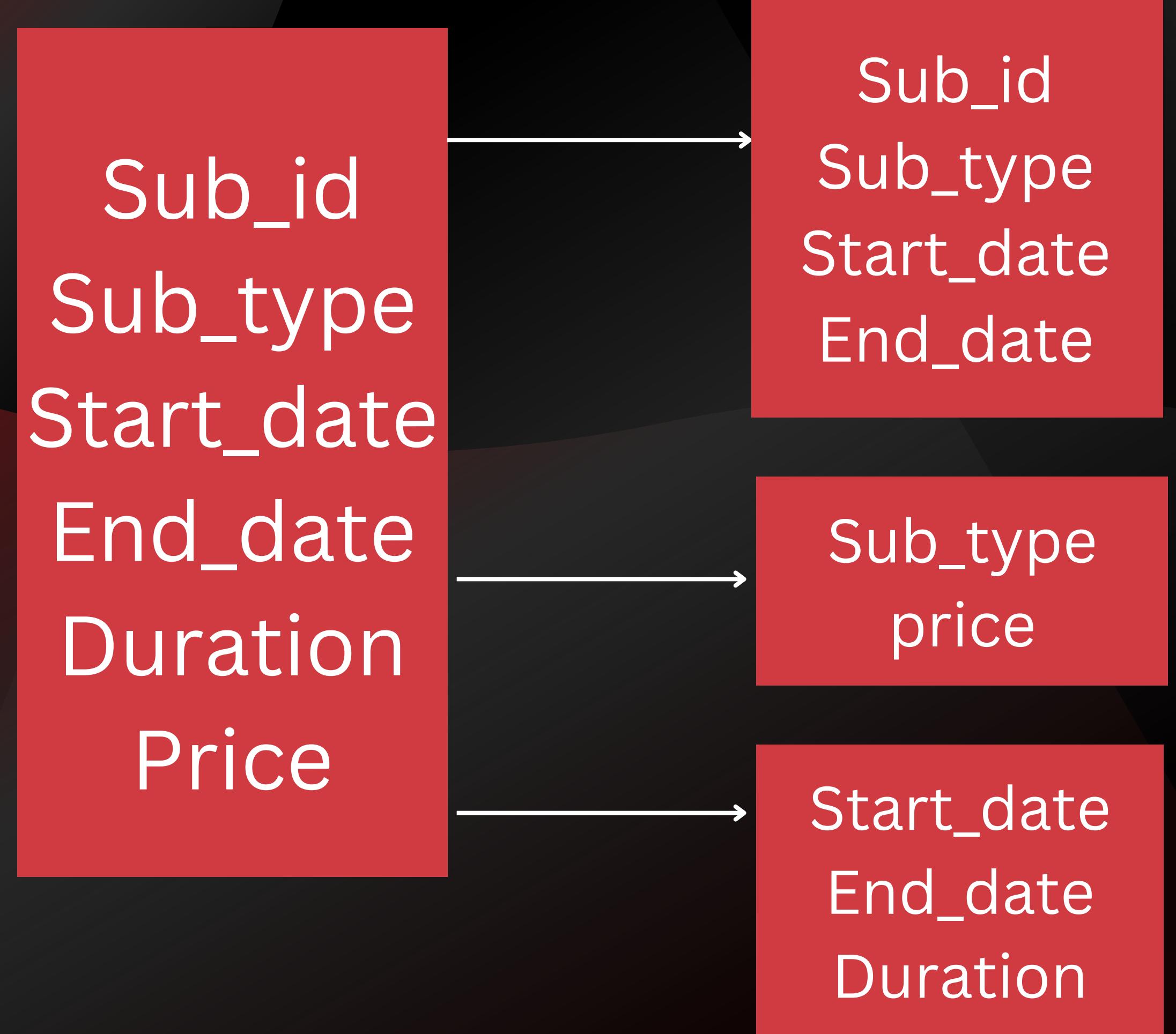
DECOMPOSITION

subscription1 = (Sub_id, Sub_Type, Start_date, End_date)

subscription2 = (Sub_Type, Price)

subscription3 = (Start date, End date, Duration)

- Since there is no non-prime attribute defining a prime attribute so it is in BCNF



NORMALISATION

4.Movies

Title -> Actor, Genre, Rating , Launched_date

Candidate key ={Title}

Prime Attribue={Title}

- Since Actor and Genre are Multivalue attributes So, it is not in 1NF

DECOMPOSITION

Movie1 = (Title, Rating, Launched_date)

Movie2 = (Title, Actor)

Movie3= (Title, Genre)

- Since there is no partial dependencies it is in 2NF
- Since there is no transitive dependencies it is in 3NF
- Since there is no non-prime attribute defining a prime attribute so it is in BCNF

Title
Actor
Genre
Rating
Launched_date



Title
Rating
Launched_date



Title
Actor



Title
Genre

NORMALISATION

5.TV_shows

Title, Season_No ->Actor, Genre, Rating ,
Launched_date, Rated, No_of_Eps
Title -> Rated

Candidate key ={Title, Season_No}
Prime Attribute={Title, Season_No}

- Since Actor and Genre are Multivalue attribute So, it is Not in 1NF

DECOMPOSITION

TV_shows1 = (Title, Season No, Rating, Launched_date, Rated)
TV_shows2 = (Title, Season No, Actor)
TV_shows3 = (Title, Season No, Genre)

NORMALISATION

5.TV_shows

- Since there is partial dependency in TV_shows1 Entity i.e,
Title -> Rated

DECOMPOSITION

TV_shows4 = (Title, Season No, Rating, Launched_date)

TV_shows5 = (Title, Rated)

- Since there is no transitive dependencies it is in 3NF
- Since there is no non-prime attribute defining a prime attribute so it is in BCNF



NORMALISATION

6.Episode

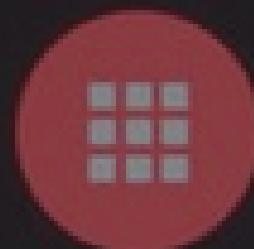
Eps_No, Title , Season_No -> Eps_Name, Duration

Candidate key ={Eps_No, Title , Season_No }

Prime Attribue={Eps_No, Title , Season_No }

- Since all attribute are in atomic form so, it is in 1NF
- Since there is no partial dependencies it is in 2NF
- Since there is no transitive dependencies it is in 3NF
- Since there is no non-prime attribute defining a prime attribute so it is in BCNF

Eps_No
Eps_Name
Duration



NETFLIX

ling

SHOWTIME

YouTube

Google Play
Movies & TV

```
mysql> select * from user1;
```

user_id	DOB	phone_no	Location	Name	Gender	Sub_id
abc@gmail.com	2002-10-15	9879732201	Gwalior	Jogesh	M	102
ank@gmail.com	2002-01-15	9879732202	Indore	Ankit	M	103
ankit@gmail.com	2004-05-14	9879732207	Agra	Ankit	M	108
ayu@gmail.com	2003-11-03	9879732203	Delhi	Ayush	M	104
ipsa@gmail.com	2002-04-15	9879732206	Jabalpur	Ipsa	F	107
mri@gmail.com	2001-04-09	9879732204	Bangalore	Mridul	M	105
ram@gmail.com	2003-08-01	9879732208	Gandhinagar	Ram	M	109
rohan@gmail.com	2000-02-08	9879732209	Patna	Rohan	M	110
sha@gmail.com	2001-12-28	9879732205	Gya	Shalini	F	106
xyz@gmail.com	2002-06-05	9879732200	Ahmedabad	Ayush	M	101

DATA OF USERS

```
mysql> select * from user2;
```

DOB	Age
2000-02-08	22
2001-04-09	21
2001-12-28	20
2002-01-15	20
2002-04-15	20
2002-06-05	20
2002-10-15	20
2003-08-01	19
2003-11-03	19
2004-05-14	18

DATA OF USERS

DATA OF MOVIES

```
mysql> select * from movie1;
```

Title	Launched_date	Rating	Sub_id	Rated
3 Idiots	2009-12-25	8.4	101	UA
83	2021-12-24	7.5	101	A
Baahubali: The Beginning	2015-07-09	8	101	UA
Bhool Bhulaiyaa 2	2022-05-20	5.7	102	A
Jersey	2022-04-22	7.3	102	UA
Kabir Singh	2019-06-20	7	102	UA
Raw	2022-04-13	5.2	103	U
RRR	2022-03-25	8	103	UA
The Conjuring	2013-07-19	7.5	103	A
The Dictator	2012-05-16	6.4	104	UA

DATA OF MOVIES

Title	Actor
3 Idiots	Aamir Khan
3 Idiots	R Madhvan
3 Idiots	Sharman Joshi
83	Ranvir Singh
Baahubali: The Beginning	Prabhas
Bhool Bhulaiyaa 2	Kartik Aaryan
Jersey	Shahid Kapoor
Kabir Singh	Shahid Kapoor
Raw	Thalapthy Vijay
RRR	Jr. NTR
The Conjuring	Vera Farmiga
The Dictator	Anna Faris,Megan Fox

DATA OF MOVIES

mysql> select * from movie3;	
Title	Genre
3 Idiots	Comedy
83	Biography
Baahubali: The Beginning	Action
Baahubali: The Beginning	Drama
Bhool Bhulaiyaa 2	Comedy
Jersey	Drama
Kabir Singh	Action
Raw	Action
Raw	Thriller
RRR	Action
RRR	Drama
The Conjuring	Horror
The Dictator	Comedy

DATA OF TV SHOWS

mysql> select * from tv_shows1;						
Title	Season_No	No_of_eps	Launched_date	Sub_id	Rating	
1899	1	8	2022-11-17	101	8	
Asur	1	8	2020-09-02	103	8	
Hostel Daze	1	5	2019-12-13	101	9	
Hostel Daze	2	4	2021-07-23	104	9	
Hostel Daze	3	6	2022-12-16	104	9	
Kota Factory	1	5	2021-11-16	103	9	
Kota Factory	2	5	2022-09-21	105	9	
Mirzapur	1	10	2018-11-16	103	9	
Mirzapur	2	9	2020-10-23	105	9	
Mission Over Mars	1	8	2019-09-10	101	7	
Pataal Lok	1	9	2020-05-15	102	8	
Scam 1992	1	10	2020-10-11	102	9	
Squid Game	1	9	2021-09-17	104	8	
The Family Man	1	10	2019-09-20	102	9	
The Family Man	2	9	2021-06-04	105	9	

DATA OF TV SHOWS

```
mysql> select * from tv_shows2;
```

Title	Season_No	Actor
1899	1	Andreas
Asur	1	Arshad Warsi
Hostel Daze	1	Nikhil Vijay
Hostel Daze	2	Nikhil Vijay
Hostel Daze	3	Nikhil Vijay
Kota Factory	1	Mayur More
Kota Factory	2	Mayur More
Mirzapur	1	Pankaj Tripathi
Mirzapur	2	Pankaj Tripathi
Mission Over Mars	1	Sakshi Tanwar
Paatal Lok	1	Jaideep Alahwat
Scam 1992	1	Pratik Gandhi
Squid Game	1	Lee Jung-Jae
The Family Man	1	Manoj Vajpayee
The Family Man	2	Manoj Vajpayee

DATA OF TV SHOWS

```
mysql> select * from tv_shows3;
```

Title	Season_No	Genre
1899	1	Mystery
Asur	1	Mystery
Hostel Daze	1	Comedy
Hostel Daze	1	Drama
Hostel Daze	2	Comedy
Hostel Daze	2	Drama
Hostel Daze	3	Action
Hostel Daze	3	Comedy
Hostel Daze	3	Drama
Kota Factory	1	Drama
Mirzapur	1	Thriller
Mission Over Mars	1	Sci-fi
Paata Lok	1	Crime
Scam 1922	1	Financial Thriller
Squid Game	1	Action
Squid Game	1	Mystery
The Family Man	1	Thriller

DATA OF TV SHOWS

Title	Rated
1899	UA
Asur	UA
Hostel Daze	UA
Kota Factory	UA
Mirzapur	A
Mission Over Mars	A
Pataal Lok	A
Scam 1992	A
Squid Game	A
The Family Man	A

DATA OF PAYMENT

mysql> select * from payment;			
payment_id	Payment_Method	Amount	user_id
1903500	Net Banking	199	abc@gmail.com
1903501	Credit Card	199	ank@gmail.com
1903502	Debit Card	499	ankit@gmail.com
1903503	Wallet	499	ayu@gmail.com
1903504	Net Banking	649	ipsa@gmail.com
1903505	Debit Card	199	mri@gmail.com
1903506	Wallet	649	ram@gmail.com
1903507	Debit Card	199	rohan@gmail.com
1903508	Net Banking	499	sha@gmail.com
1903509	Credit Card	199	xyz@gmail.com

DATA OF SUBSCRIPTION

```
mysql> select * from subscription1;
```

Sub_id	sub_type	Start_date	End_date
101	basic	2019-03-13	2019-04-14
102	standard	2019-09-17	2019-10-18
103	standard	2020-01-14	2020-02-15
104	premium	2020-05-27	2020-08-28
105	basic	2020-07-03	2020-08-04
106	standard	2020-07-12	2020-09-13
107	basic	2021-04-18	2021-06-19
108	premium	2021-05-18	2021-07-19
109	premium	2021-07-11	2021-10-12
110	basic	2021-08-18	2021-09-19

DATA OF SUBSCRIPTION

```
mysql> select * from subscription2;
+-----+-----+
| sub_type | price |
+-----+-----+
| basic    | 199   |
| premium  | 649   |
| standard | 499   |
+-----+-----+
```



DATA OF SUBSCRIPTION

MENU

[Home](#)[Movies](#)[TV Shows](#)[Series](#)[Favourites](#)

PERSONAL

[Account](#)[Subscription](#)

Search

Log Out

```
mysql> select * from subscription3;
```

Start_date	End_date	duration
2019-03-13	2019-04-14	1
2019-09-17	2019-10-18	1
2020-01-14	2020-02-15	1
2020-05-27	2020-08-28	3
2020-07-03	2020-08-04	1
2020-07-12	2020-09-13	2
2021-04-18	2021-06-19	2
2021-05-18	2021-07-19	2
2021-07-11	2021-10-12	3
2021-08-18	2021-09-19	1

ilar Movies



Flight Plan

Thriller, Mystery

IMDb 6.3

Stardust



Fantasy, Adventure

IMDb 7.6

Tron



Sci-Fi, Thriller

IMDb 6.8

coco



Family, Comedy

IMDb 8.4

Black Widow



Action, Adventure

IMDb 6.8

DATA OF EPISODES

```
mysql> select * from episode;
```

Eps_No.	Title	Season_No	Eps_Name	Duration
1	1899	1	The Ship	50
1	Asur	1	The Dead Can Talk	46
1	Hostel Daze	1	Intro	33
1	Hostel Daze	2	D.I.S.C.O	34
1	Hostel Daze	3	Failed Experiments	28
1	Kota Factory	1	Inventory	47
1	Kota Factory	2	Reasoning	44
1	Mirzapur	1	Jhandu	53
1	Mirzapur	2	DhenKul	60
1	Mission Over Mars	1	Chale Toh Chaand Tak	34
1	Pataal Lok	1	Bridges	42
1	Scam 1992	1	Risk se Ishq	49
1	Squid Game	1	Red light Green Light	59
1	The Family Man	1	The Family Man	54
1	The Family Man	2	Exile	60
2	1899	1	The Boy	48
2	Asur	1	Rabbit Hole	47
2	Hostel Daze	1	Proving Identity	32
2	Hostel Daze	2	Love-Square	32
2	Hostel Daze	3	Wing Chor	32
2	Kota Factory	1	Assembly Line	30
2	Kota Factory	2	Control System	44
2	Mirzapur	1	Gooda	45
2	Mirzapur	2	Khargosh	49
2	Mission Over Mars	1	To Mars	29
2	Pataal Lok	1	Lost and Found	45
2	Scam 1992	1	Cobra Killer	54
2	Squid Game	1	Hell	62
2	The Family Man	1	Slippers	48
2	The Family Man	2	Weapon	52
3	1899	1	The Fog	49
3	Asur	1	Peek-a-boo	36
3	Hostel Daze	1	F.O.S.L.A	31
3	Hostel Daze	2	Gandagi	32
3	Hostel Daze	3	Lights Camera Cut	28
3	Kota Factory	1	Optimization	36

DATA OF EPISODES

3	Kota Factory	2	Atmospheric Pressure	31
3	Mirzapur	1	Wafadar	43
3	Mirzapur	2	Viklang Kota	39
3	Mission Over Mars	1	Seven Rupees Per km	31
3	Pataal Lok	1	A History of Violence	47
3	Scam 1992	1	Pese ki Dukaan	53
3	Squid Game	1	the Man with the Umbrella	54
3	The Family Man	1	Anti National	48
3	The Family Man	2	Angel of Death	35
4	1899	1	The Fight	51
4	Asur	1	Ashes from the Past	37
4	Hostel Daze	1	GPL	31
4	Hostel Daze	2	Ghar Wapsi	31
4	Hostel Daze	3	Dosti ka Udhar	29
4	Kota Factory	1	Shut Down	40
4	Kota Factory	2	Repair and Maintenance	38
4	Mirzapur	1	Virginity	43
4	Mirzapur	2	Bhaymukt	59
4	Mission Over Mars	1	Phuljhadi wala Rocket	27
4	Pataal Lok	1	Sleepless in Seelampur	44
4	Scam 1992	1	Harshad Mehta Is a Liar	56
4	Squid Game	1	Stick to The team	54
4	The Family Man	1	Patriots	42
4	The Family Man	2	Eagle	51
5	1899	1	The Calling	50
5	Asur	1	The Devil has Face	37
5	Hostel Daze	1	End Sem	32
5	Hostel Daze	3	G.S.H.A	33
5	Kota Factory	1	Overhaul	40
5	Kota Factory	2	Packaging	39
5	Mirzapur	1	Bhaukaal	49
5	Mirzapur	2	Langda	52
5	Mission Over Mars	1	100 percent Indian	34
5	Pataal Lok	1	Of Fathers and Sons	43
5	Scam 1992	1	Kundli me Shani	52
5	Squid Game	1	A fair world	51
5	The Family Man	1	Pariah	49
5	The Family Man	2	Homecoming	44
6	1899	1	The Pyramid	49

DATA OF EPISODES

6	Asur	1	The Firewall	38
6	Hostel Daze	3	Dear Seniors	42
6	Mirzapur	1	Barfi	47
6	Mirzapur	2	Ankush	53
6	Mission Over Mars	1	Viganharta ganesha	24
6	Pataal Lok	1	The Past in Prologue	43
6	Scam 1992	1	Stop Press	42
6	Squid Game	1	Gganbu	61
6	The Family Man	1	Dance of Death	41
6	The Family Man	2	Martrys	42
7	1899	1	The Stall	50
7	Asur	1	Let there be Darkness	47
7	Mirzapur	1	Lines of Mirzapur	53
7	Mirzapur	2	Ood Bilav	49
7	Mission Over Mars	1	Never Say Never	28
7	Pataal Lok	1	Bad Lands	43
7	Scam 1992	1	Dalal Street ka Dariya	42
7	Squid Game	1	VIPs	57
7	The Family Man	1	Paradise	41
7	The Family Man	2	Collateral Damage	37
8	1899	1	The Key	48
8	Asur	1	End is the Beginnings	60
8	Mirzapur	1	Tandav	47
8	Mirzapur	2	Chauchak	57
8	Mission Over Mars	1	Super Computer Vs Us	33
8	Pataal Lok	1	Black Widow	42
8	Scam 1992	1	Matador	56
8	Squid Game	1	Frontman	32
8	The Family Man	1	Act of War	45
8	The Family Man	2	Vendetta	43
9	Mirzapur	1	Yogya	47
9	Mirzapur	2	Butterscotch	56
9	Pataal Lok	1	Swarg Dawar	44
9	Scam 1992	1	Ek Crore ka Suitcase	58
9	Squid Game	1	One Lucky Day	55
9	The Family Man	1	Fighting Dirty	39
9	The Family Man	2	the Final Act	61
10	Mirzapur	2	King of Mirzapur	65
10	Scam 1992	1	Me History Banana Chahta Hoon	60

SQL QUERIES

Display title and season_no of the tv shows whose genre is comedy and launched after 01-01-2020

```
select Title , season_no from tv_shows1 natural  
join tv_shows3 where launched_date > '2020-  
01-01' and genre='comedy';
```

Title	season_no
Hostel Daze	2

SQL QUERIES

Display the count of movies in each genre.

```
select genre,count(*) from movie3  
group by genre ;
```

```
mysql> select genre,count(*) from movie3 group by genre ;  
+-----+-----+  
| genre | count(*) |  
+-----+-----+  
| Comedy |      3 |  
| Biography |    1 |  
| Action |    1 |  
| Drama |    3 |  
| Action |    3 |  
| Thriller |    1 |  
| Horror |    1 |  
+-----+-----+
```

SQL QUERIES

Display the number of episode in each season of every TV Show.

```
select title, season_no, count(eps_no)
from episode group by title, season_no;
```

```
mysql> select title, season_no, count(eps_no) from episode group by title, season_no;
```

title	season_no	count(eps_no)
1899	1	8
Asur	1	8
Hostel Daze	1	5
Hostel Daze	2	4
Hostel Daze	3	6
Kota Factory	1	5
Kota Factory	2	5
Mirzapur	1	9
Mirzapur	2	10
Mission Over Mars	1	8
Pataal Lok	1	9
Scam 1992	1	10
Squid Game	1	9
The Family Man	1	10
The Family Man	2	9

SQL QUERIES

Display the details of users whose subscription type is premium

```
select * from user1 where sub_id in  
(select sub_id from subscription1 where  
sub_type='premium');
```

```
mysql> select * from user1 where sub_id in (select sub_id from subscription1 where sub_type='premium');  
+-----+-----+-----+-----+-----+-----+  
| user_id | DOB   | phone_no | Location | Name  | Gender | Sub_id |  
+-----+-----+-----+-----+-----+-----+  
| ankit@gmail.com | 2004-05-14 | 9879732207 | Agra    | Ankit | M     | 108  |  
| ayu@gmail.com  | 2003-11-03  | 9879732203 | Delhi   | Ayush | M     | 104  |  
| ram@gmail.com | 2003-08-01  | 9879732208 | Gandhinagar | Ram  | M     | 109  |  
+-----+-----+-----+-----+-----+-----+
```

SQL QUERIES

Display the names of the users whose payment method for buying subscription is Debit Card.

```
select name from user1 natural join  
payment where payment_method =  
'debit card';
```

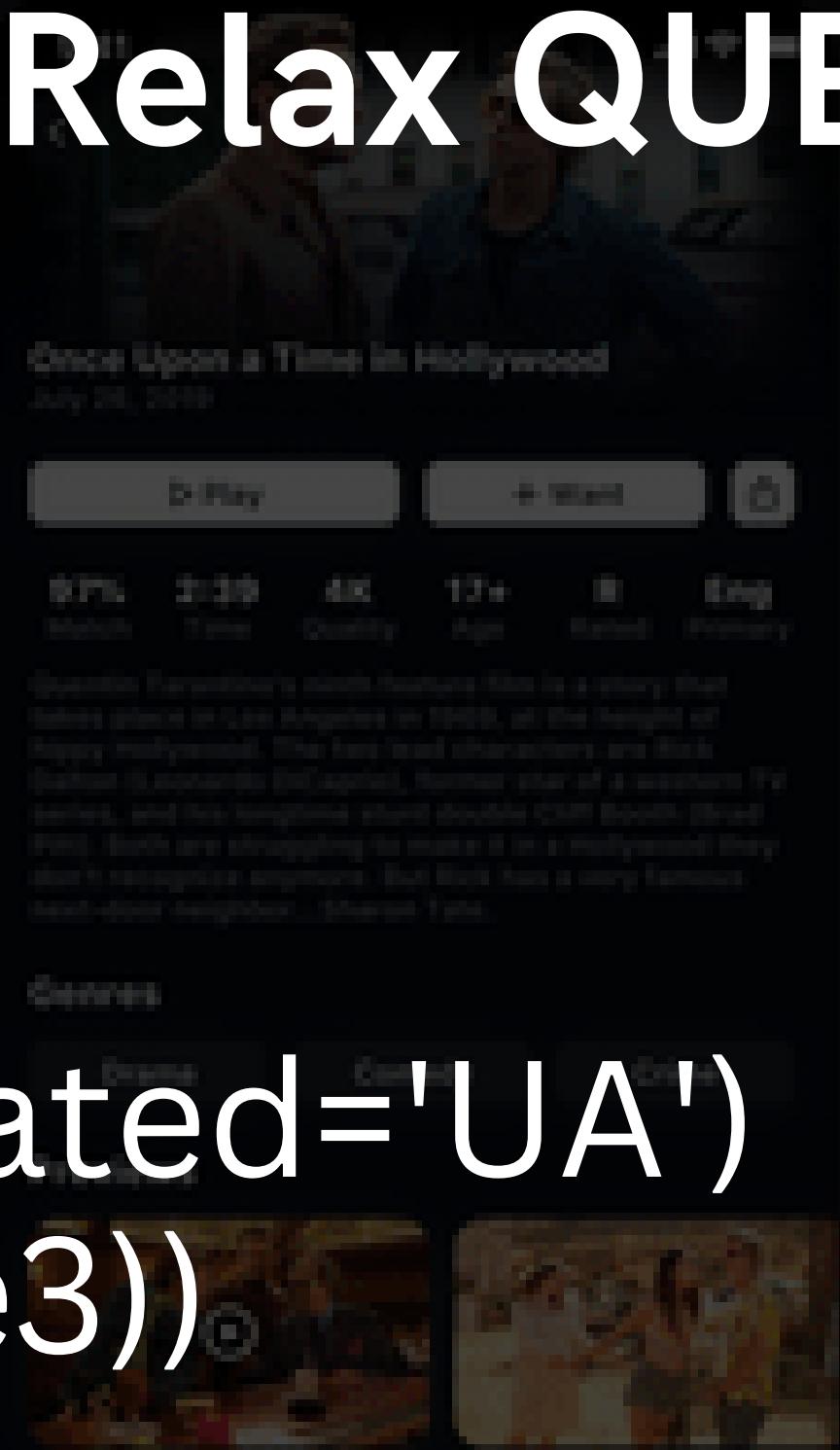
```
mysql> select name from user1 natural join payment where payment_method = 'debit card';  
+-----+  
| name |  
+-----+  
| Ankit |  
| Mridul |  
| Rohan |  
+-----+
```

Relax QUERIES

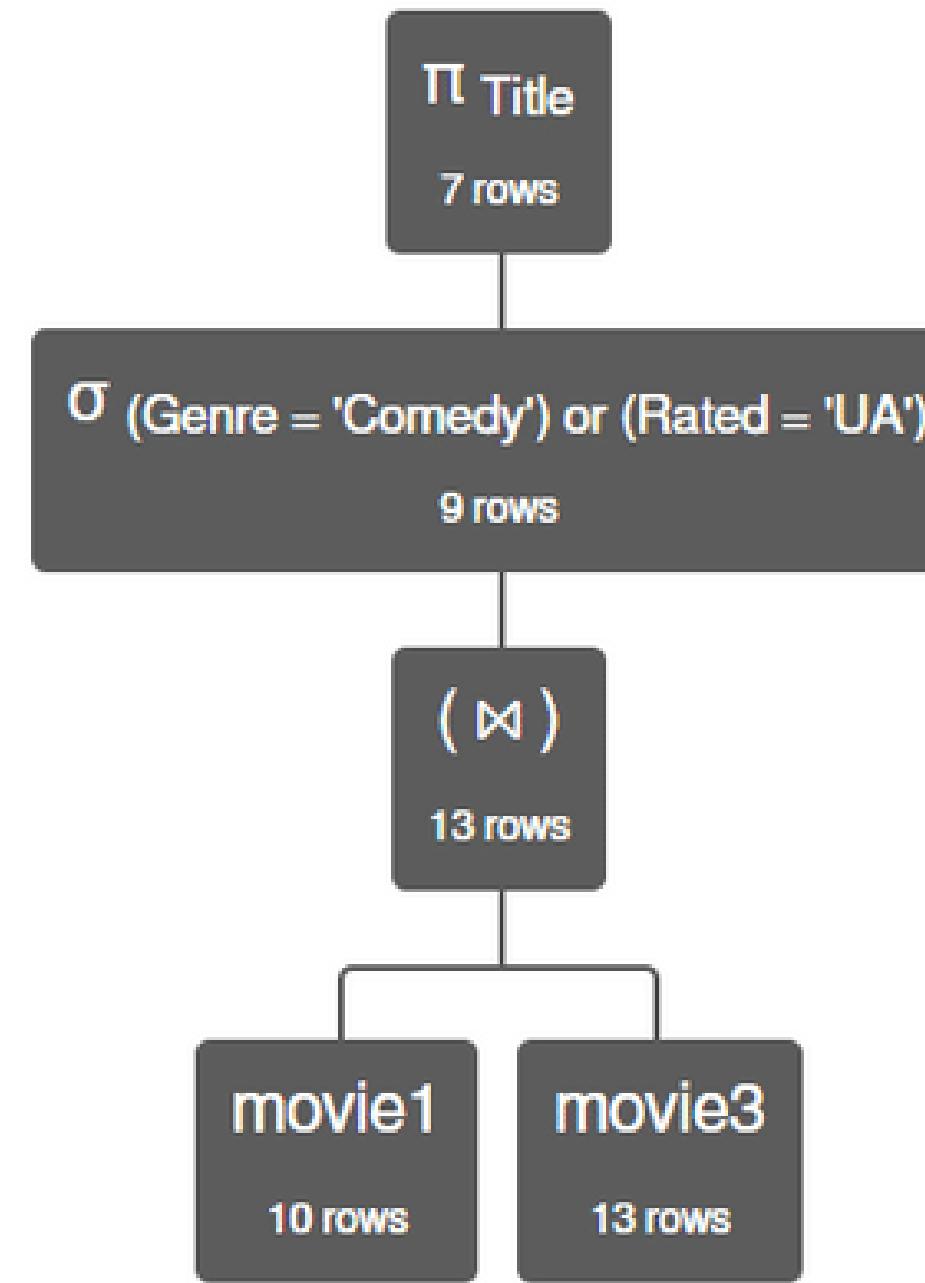
Display all the movie titles with a comedy genre or 'UA' rated.

$\pi \text{Title}(\sigma$

(Genre='Comedy') \vee (Rated='UA')
(movie1 \bowtie movie3))



TV



$\Pi \text{ Title} (\sigma (\text{Genre} = \text{'Comedy'}) \text{ or } (\text{Rated} = \text{'UA'}))$

Execution time: 1 ms

movie1.Title

'3 Idiots '

'Baahubali: The Beginning'

'Bhool Bhulaiyaa 2'

'Jersey'

'Kabir Singh'

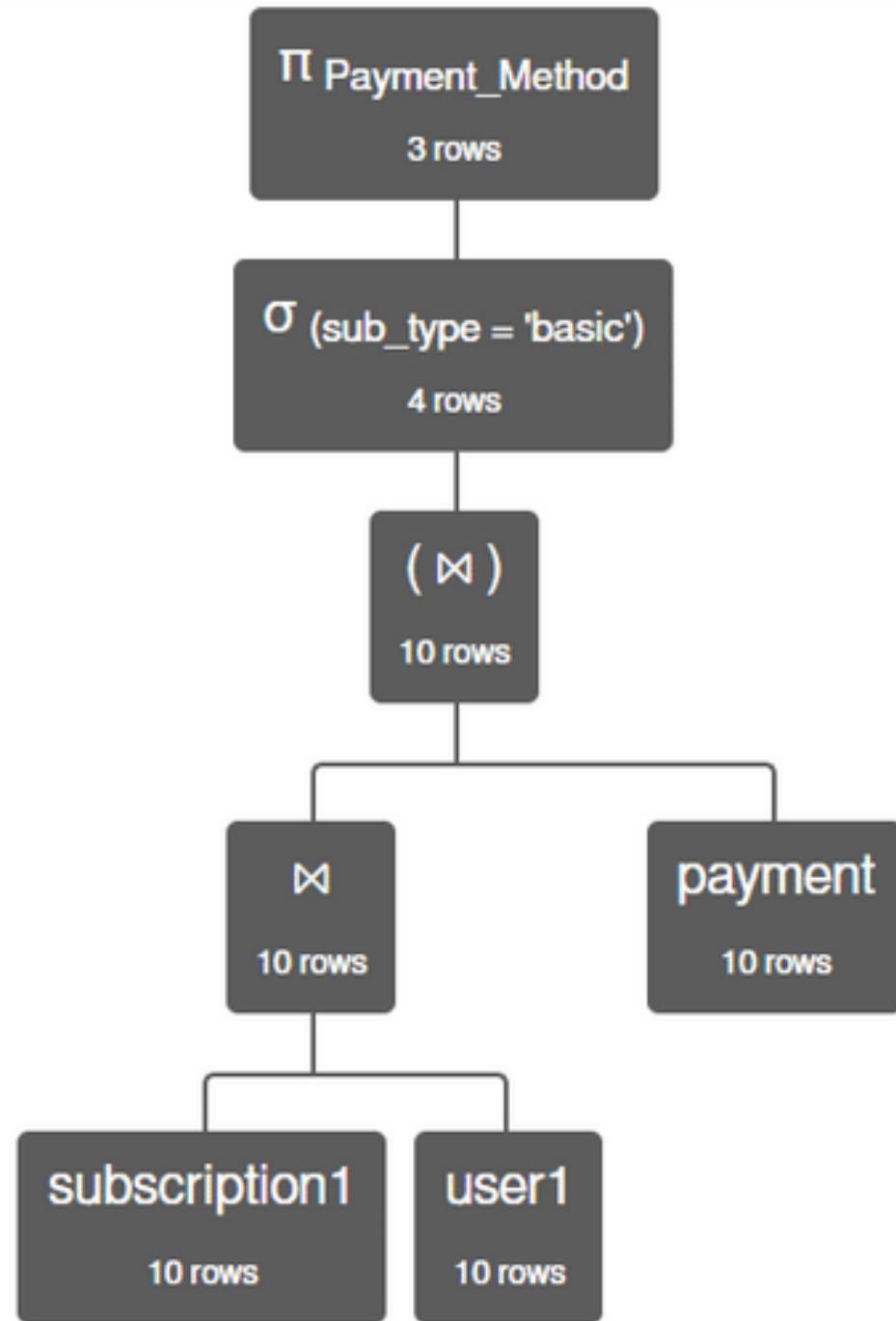
'RRR'

'The Dictator'

Relax QUERIES

Display the payment method of all the customers having a basic plan.

$$\pi \text{ Payment_Method}(\sigma (\text{sub_type} = \text{'basic'}) \\ (\text{subscription1} \bowtie \text{user1} \bowtie \text{payment}))$$


$$\Pi \text{ Payment_Method} \left(\sigma \text{ (sub_type = 'basic')} \left(\left(\text{subscription1} \bowtie \text{user1} \right) \bowtie \text{payment} \right) \right)$$

Execution time: 4 ms

payment.Payment_Method

'Credit Card'

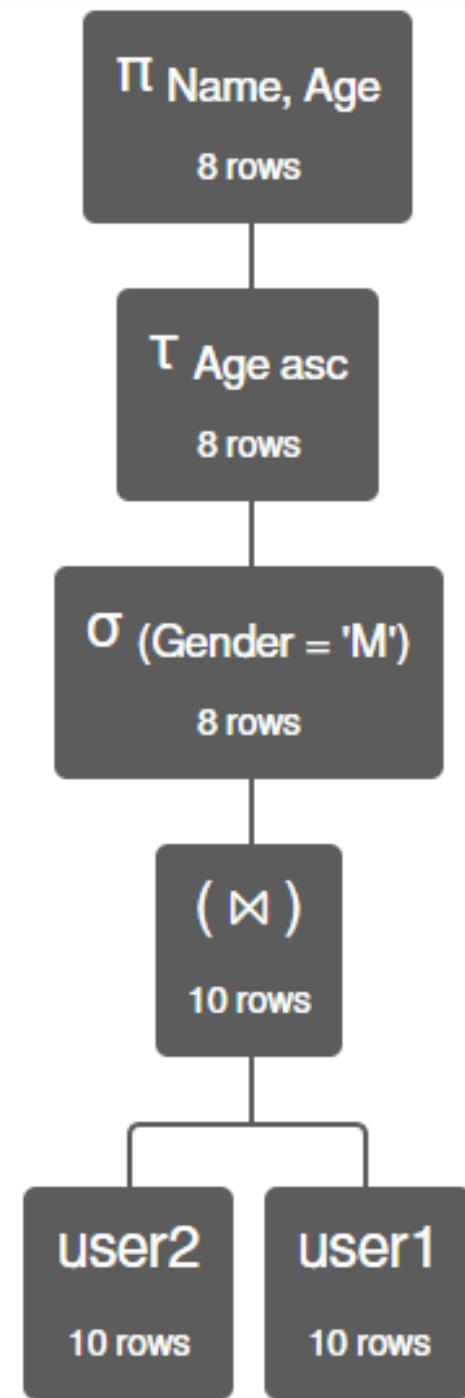
'Debit Card'

'Net Banking'

Relax QUERIES

Order down all the male customers
on the basis of their ages

$$\pi \text{Name}, \text{Age} \tau \text{Age} (\sigma (\text{Gender} = 'M') (\\ \text{user2} \bowtie \text{user1}))$$



Π Name, Age τ Age asc (σ (Gender = 'M') (user2 \bowtie user1))

Execution time: 5 ms

user1.Name	user2.Age
'Ankit'	18
'Ram'	19
'Ayush'	19
'Ankit'	20
'Ayush'	20
'Jogesh'	20
'Mridul'	21
'Rohan'	22

'Ankit'	18
---------	----

'Ram'	19
-------	----

'Ayush'	19
---------	----

'Ankit'	20
---------	----

'Ayush'	20
---------	----

'Jogesh'	20
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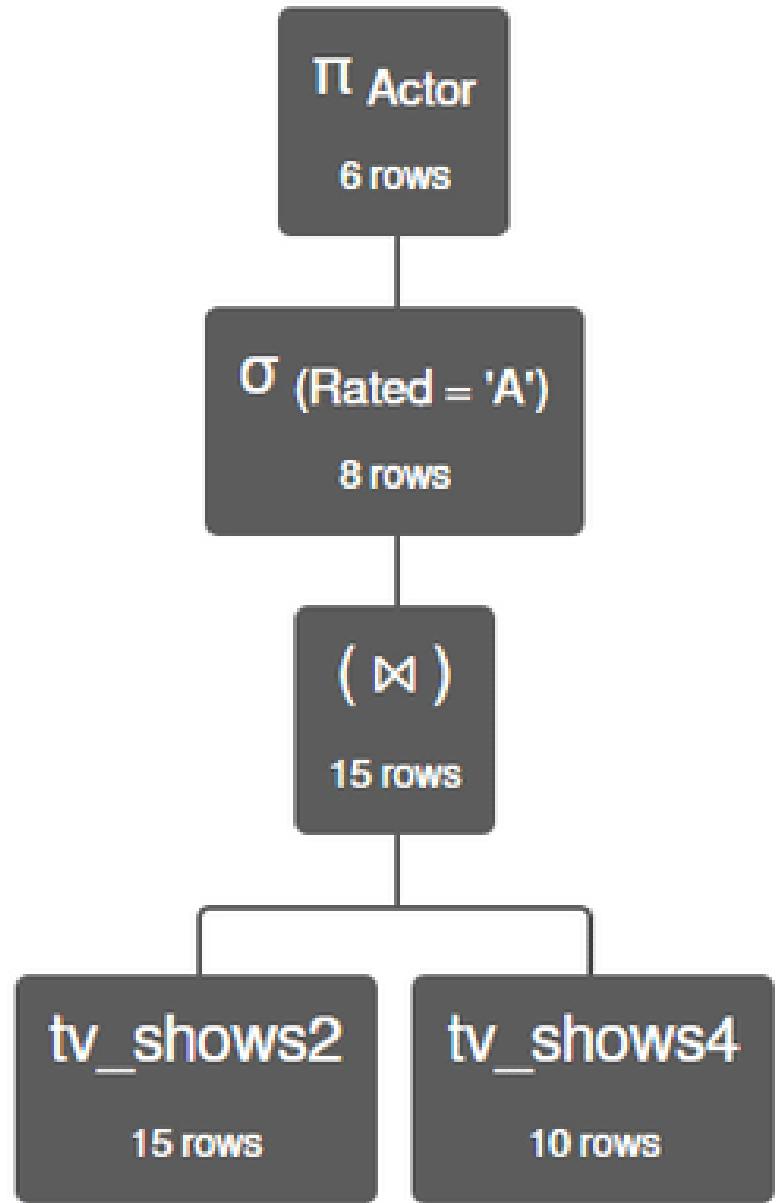
'Mridul'	21
----------	----

'Rohan'	22
---------	----

Relax QUERIES

Display all the actors who have worked in 'A' rated tv shows.

$$\pi \text{ Actor}(\sigma (\text{Rated}='A')(\text{tv_shows2} \bowtie \text{tv_shows4}))$$


$$\Pi \text{ Actor} (\sigma (\text{Rated} = 'A') (\text{tv_shows2} \bowtie \text{tv_shows4}))$$

Execution time: 1 ms

tv_shows2.Actor

'Pankaj Tripathi'

'Sakshi Tanwar'

'Jaideep Alahwat'

'Pratik Gandhi'

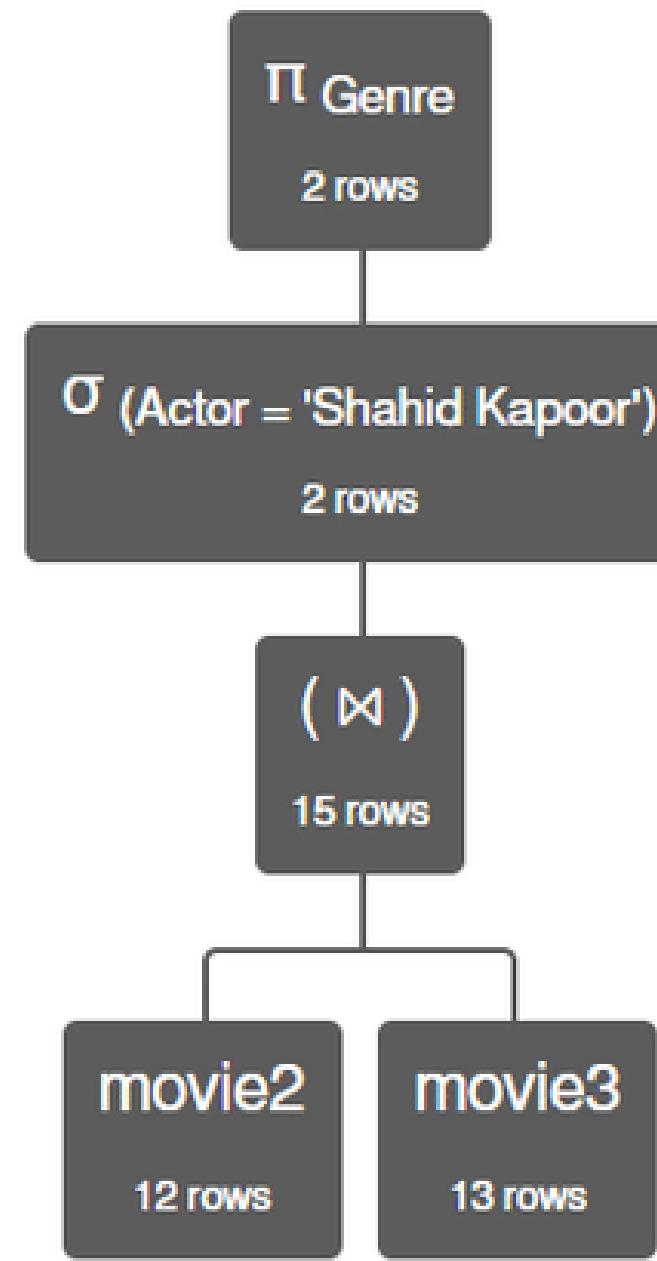
'Lee Jung-Jae'

'Manoj Vajpayee'

Relax QUERIES

Display all the movie genres in which Shahid Kapoor has appeared.

$$\pi \text{Genre}(\sigma (\text{Actor}=\text{'Shahid Kapoor'}) \\ (\text{movie2} \bowtie \text{movie3}))$$



$\Pi \text{Genre} (\sigma (\text{Actor} = \text{'Shahid Kapoor'}) (\text{movie2} \bowtie \text{movie3}))$

Execution time: 1 ms

movie3.Genre

'Drama'

'Action'



THANK YOU