IIITV MOVIE/TV DATABASE

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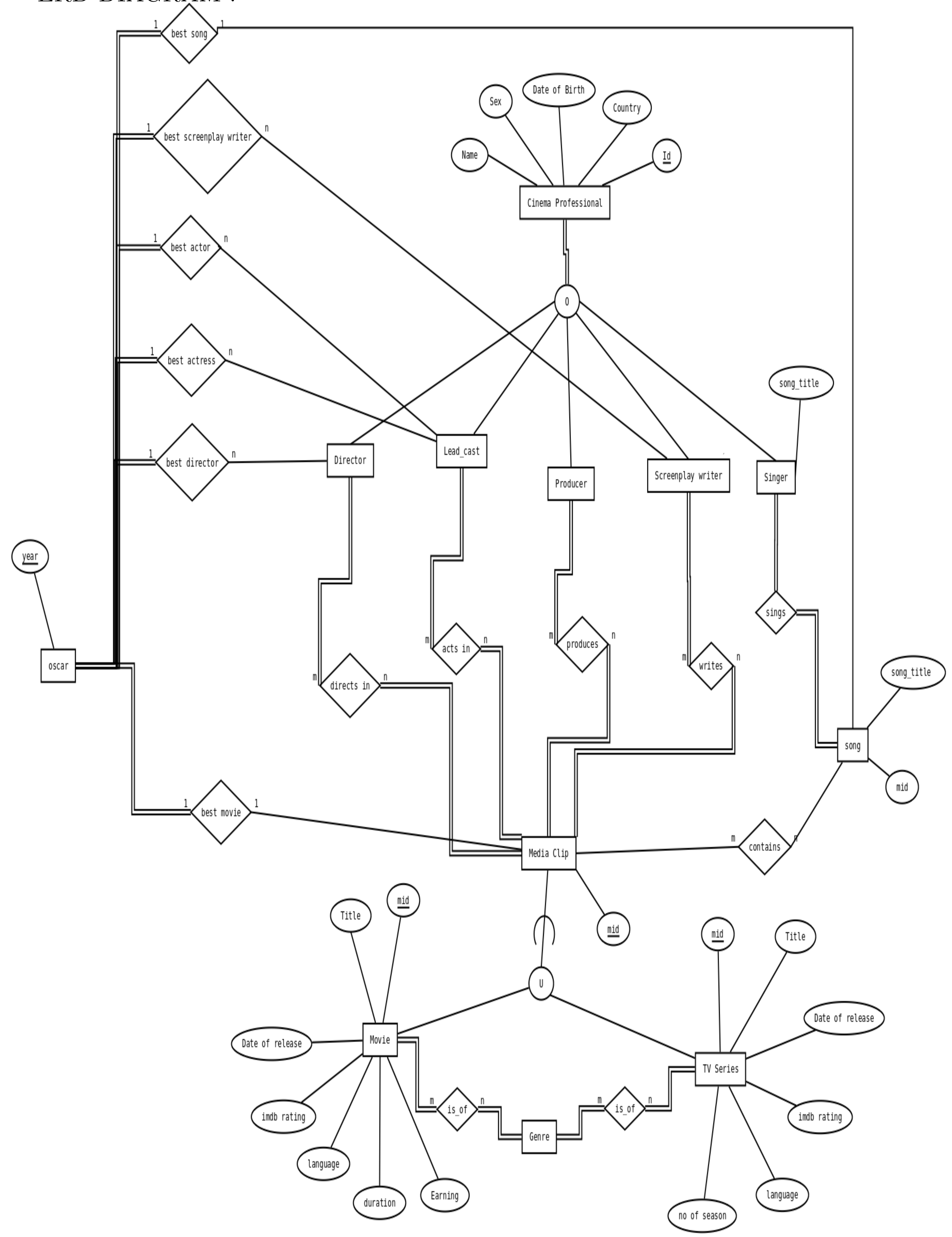
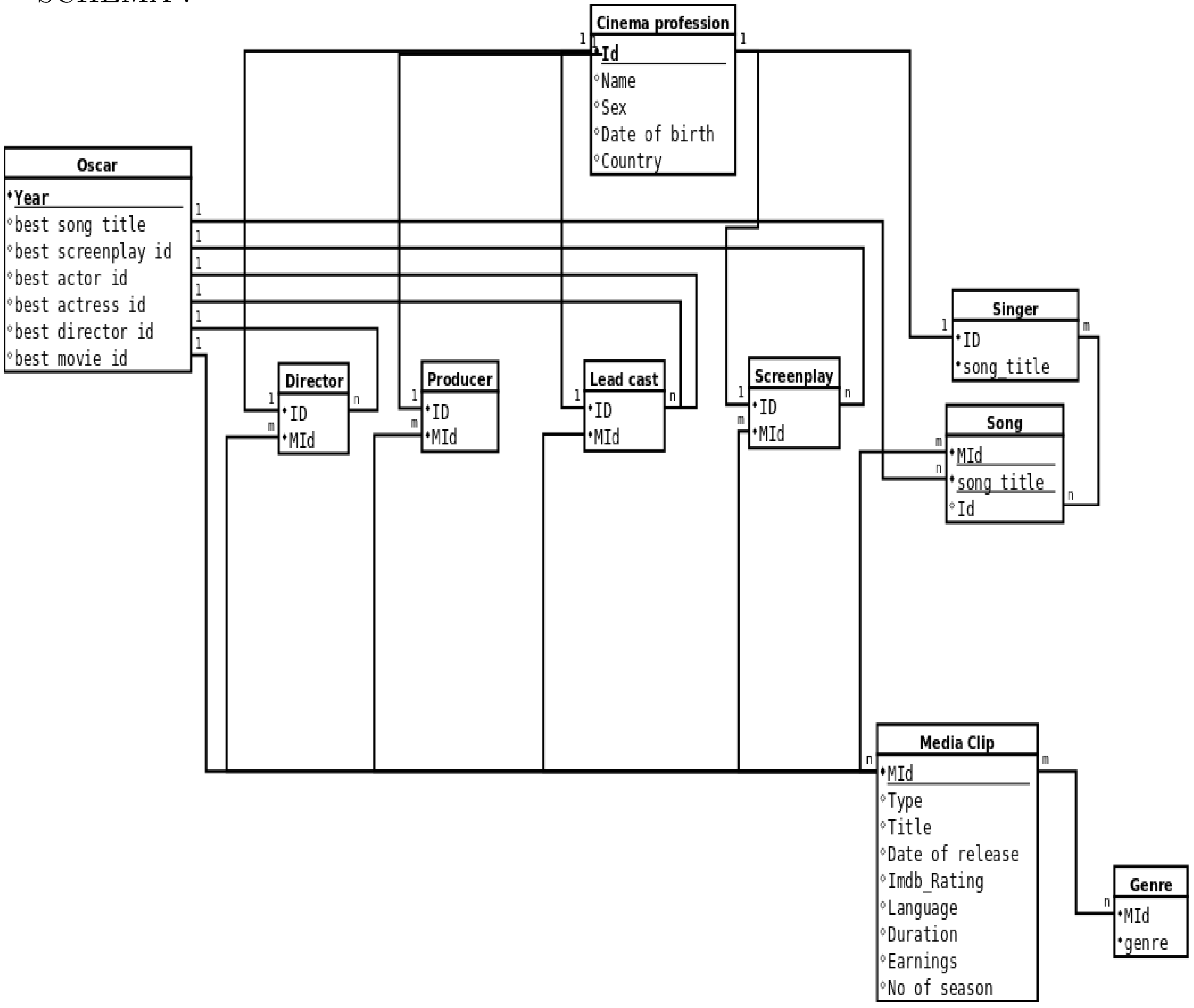
Project Title : IIITV MOVIE/TV DATABASE

ERD DIAGRAM :



best song
best screenplay writer
best actor
best actress
best director
Sex
Date of Birth
Country
Name
Id
Cinema Professional
O
song_title
Director
Lead_cast
Producer
Screenplay writer
Singer
year
oscar
sings
acts in
produces
writes
directs in
song_title
song
mid
best movie
Media Clip
contains
mid
Title
mid
U
mid
Title
Date of release
Movie
Date of release
TV Series
is_of
Genre
is_of
imdb rating
imdb rating
language
duration
Earning
no of season
language
1
n
m

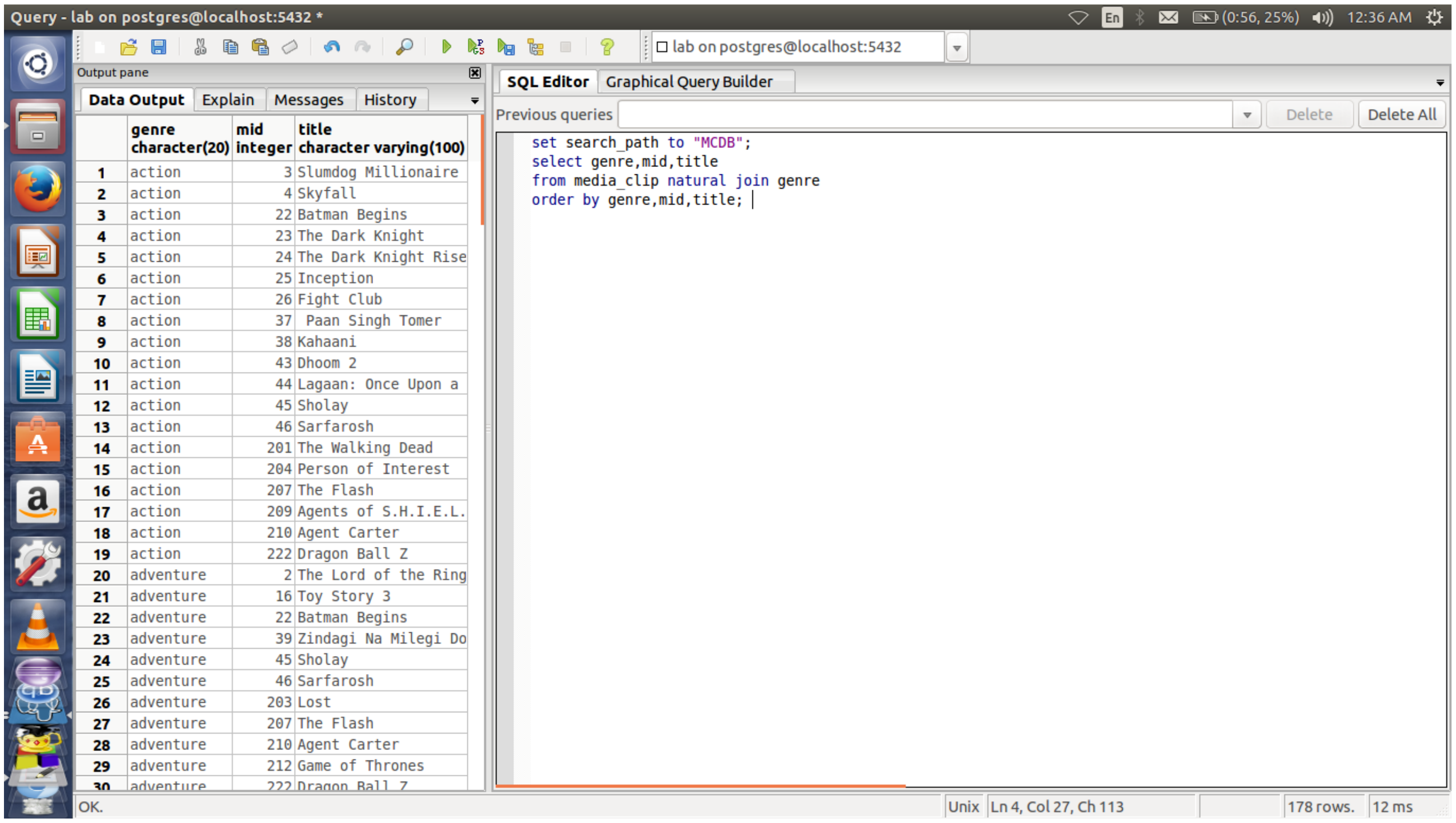
SCHEMA :


Cinema profession
Id
Name
Sex
Date of birth
Country
Oscar
Year
best song title
best screenplay id
best actor id
best actress id
best director id
best movie id
Director
ID
MId
Producer
ID
MId
Lead cast
ID
MId
Screenplay
ID
MId
Singer
ID
song_title
Song
MId
song_title
Id
Media Clip
MId
Type
Title
Date of release
Imdb_Rating
Language
Duration
Earnings
No of season
Genre
MId
genre

SQL QUERIES :

1. QUESTION : List all the media clips and order by genre.
   SQL:

```
set search_path to "MCDB";
select genre,mid,title
from media_clip natural join genre
order by genre,mid,title;
```



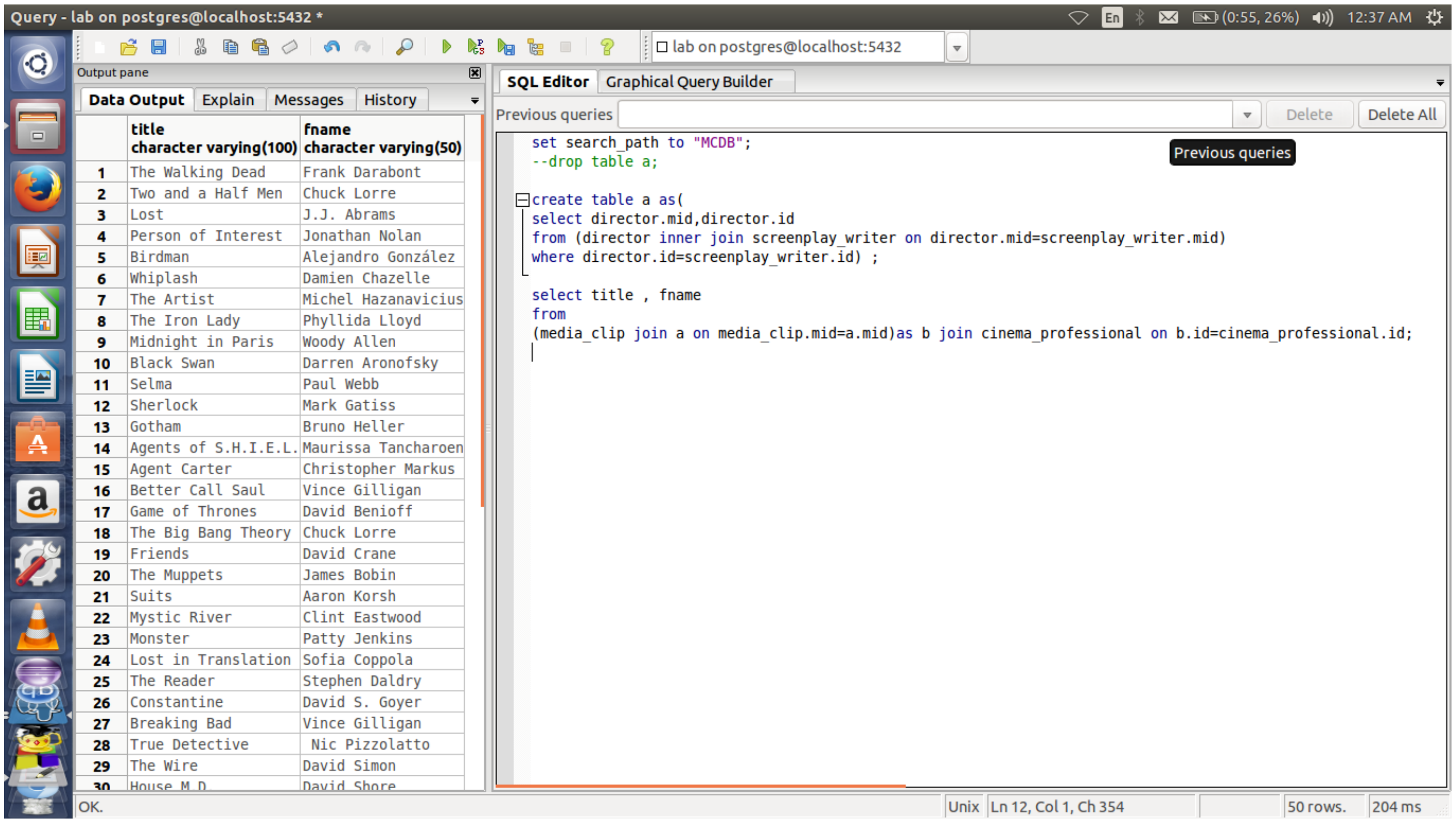
	genre character(20)	mid integer	title character varying(100)
1	action	3	Slumdog Millionaire
2	action	4	Skyfall
3	action	22	Batman Begins
4	action	23	The Dark Knight
5	action	24	The Dark Knight Rise
6	action	25	Inception
7	action	26	Fight Club
8	action	37	Paan Singh Tomer
9	action	38	Kahaani
10	action	43	Dhoom 2
11	action	44	Lagaan: Once Upon a
12	action	45	Sholay
13	action	46	Sarfarosh
14	action	201	The Walking Dead
15	action	204	Person of Interest
16	action	207	The Flash
17	action	209	Agents of S.H.I.E.L.
18	action	210	Agent Carter
19	action	222	Dragon Ball Z
20	adventure	2	The Lord of the Ring
21	adventure	16	Toy Story 3
22	adventure	22	Batman Begins
23	adventure	39	Zindagi Na Milegi Do
24	adventure	45	Sholay
25	adventure	46	Sarfarosh
26	adventure	203	Lost
27	adventure	207	The Flash
28	adventure	210	Agent Carter
29	adventure	212	Game of Thrones
30	adventure	222	Dragon Ball Z

```
set search_path to "MCDB";
select genre,mid,title
from media_clip natural join genre
order by genre,mid,title;
```

OK. Unix Ln 4, Col 27, Ch 113 178 rows. 12 ms

2. QUESTION : List the media_clip in which the director is also a writer
   SQL:

```
set search_path to "MCDB";
--drop table a;

create table a as(
select director.mid,director.id
from (director inner join screenplay_writer on director.mid=screenplay_writer.mid)
where director.id=screenplay_writer.id) ;

select title , fname
from
(media_clip join a on media_clip.mid=a.mid)as b join cinema_professional on b.id=
    cinema_professional.id;
```



Query - lab on postgres@localhost:5432 *

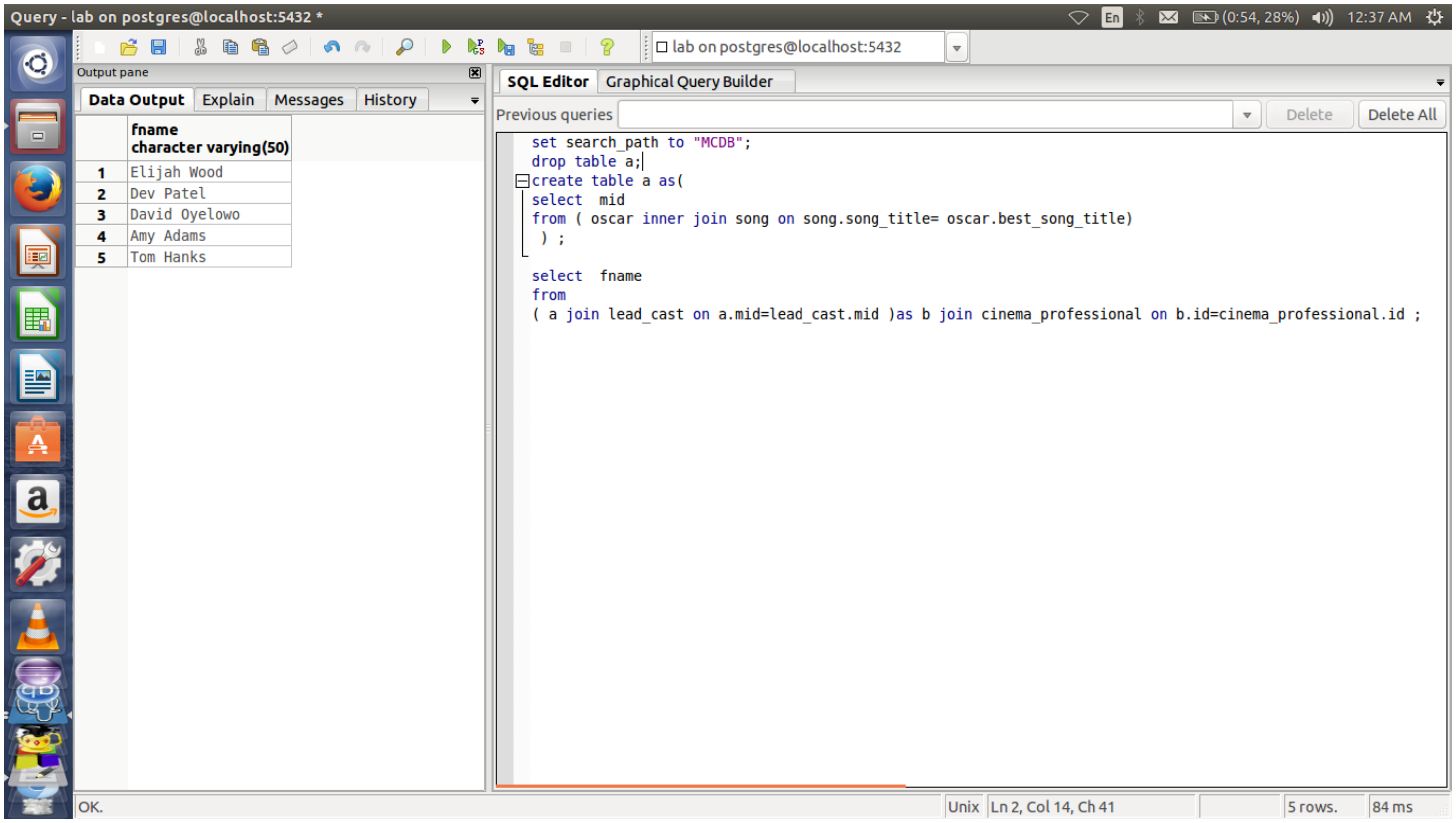
	title character varying(100)	fname character varying(50)
1	The Walking Dead	Frank Darabont
2	Two and a Half Men	Chuck Lorre
3	Lost	J.J. Abrams
4	Person of Interest	Jonathan Nolan
5	Birdman	Alejandro González
6	Whiplash	Damien Chazelle
7	The Artist	Michel Hazanavicius
8	The Iron Lady	Phyllida Lloyd
9	Midnight in Paris	Woody Allen
10	Black Swan	Darren Aronofsky
11	Selma	Paul Webb
12	Sherlock	Mark Gatiss
13	Gotham	Bruno Heller
14	Agents of S.H.I.E.L.	Maurissa Tancharoen
15	Agent Carter	Christopher Markus
16	Better Call Saul	Vince Gilligan
17	Game of Thrones	David Benioff
18	The Big Bang Theory	Chuck Lorre
19	Friends	David Crane
20	The Muppets	James Bobin
21	Suits	Aaron Korsh
22	Mystic River	Clint Eastwood
23	Monster	Patty Jenkins
24	Lost in Translation	Sofia Coppola
25	The Reader	Stephen Daldry
26	Constantine	David S. Goyer
27	Breaking Bad	Vince Gilligan
28	True Detective	Nic Pizzolatto
29	The Wire	David Simon
30	House M.D.	David Shore

```
set search_path to "MCDB";
--drop table a;

create table a as(
select director.mid,director.id
from (director inner join screenplay_writer on director.mid=screenplay_writer.mid)
where director.id=screenplay_writer.id) ;

select title , fname
from
(media_clip join a on media_clip.mid=a.mid)as b join cinema_professional on b.id=cinema_professional.id;
```

OK. Unix Ln 12, Col 1, Ch 354 50 rows. 204 ms

3. QUESTION : List lead cast of the movies of all the best songs
SQL:

```
create table a as(
select  mid
from ( oscar inner join song on song.song_title= oscar.best_song_title)
 ) ;

select  fname
from
( a join lead_cast on a.mid=lead_cast.mid )as b join cinema_professional on b.id=
    cinema_professional.id ;
```

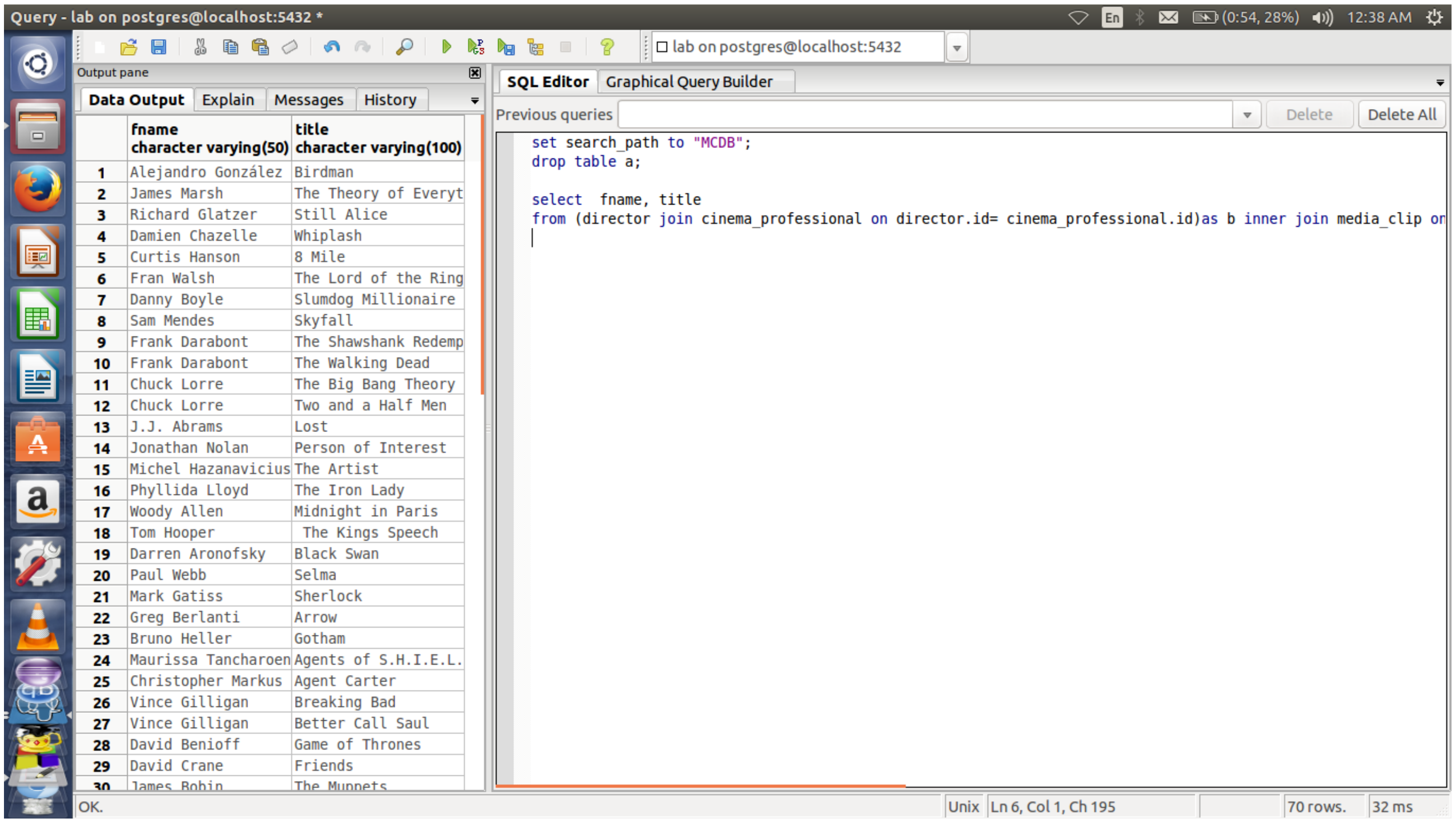


```
set search_path to "MCDB";
drop table a;
create table a as(
select  mid
from ( oscar inner join song on song.song_title= oscar.best_song_title)
 ) ;

select  fname
from
( a join lead_cast on a.mid=lead_cast.mid )as b join cinema_professional on b.id=cinema_professional.id ;
```

	fname character varying(50)
1	Elijah Wood
2	Dev Patel
3	David Oyelowo
4	Amy Adams
5	Tom Hanks

4. QUESTION : Name the directors with distinct media_clip present in database
SQL:

```
drop table a;

select  fname, title
from (director join cinema_professional on director.id= cinema_professional.id)as b inner
    join media_clip on b.mid=media_clip.mid;
```



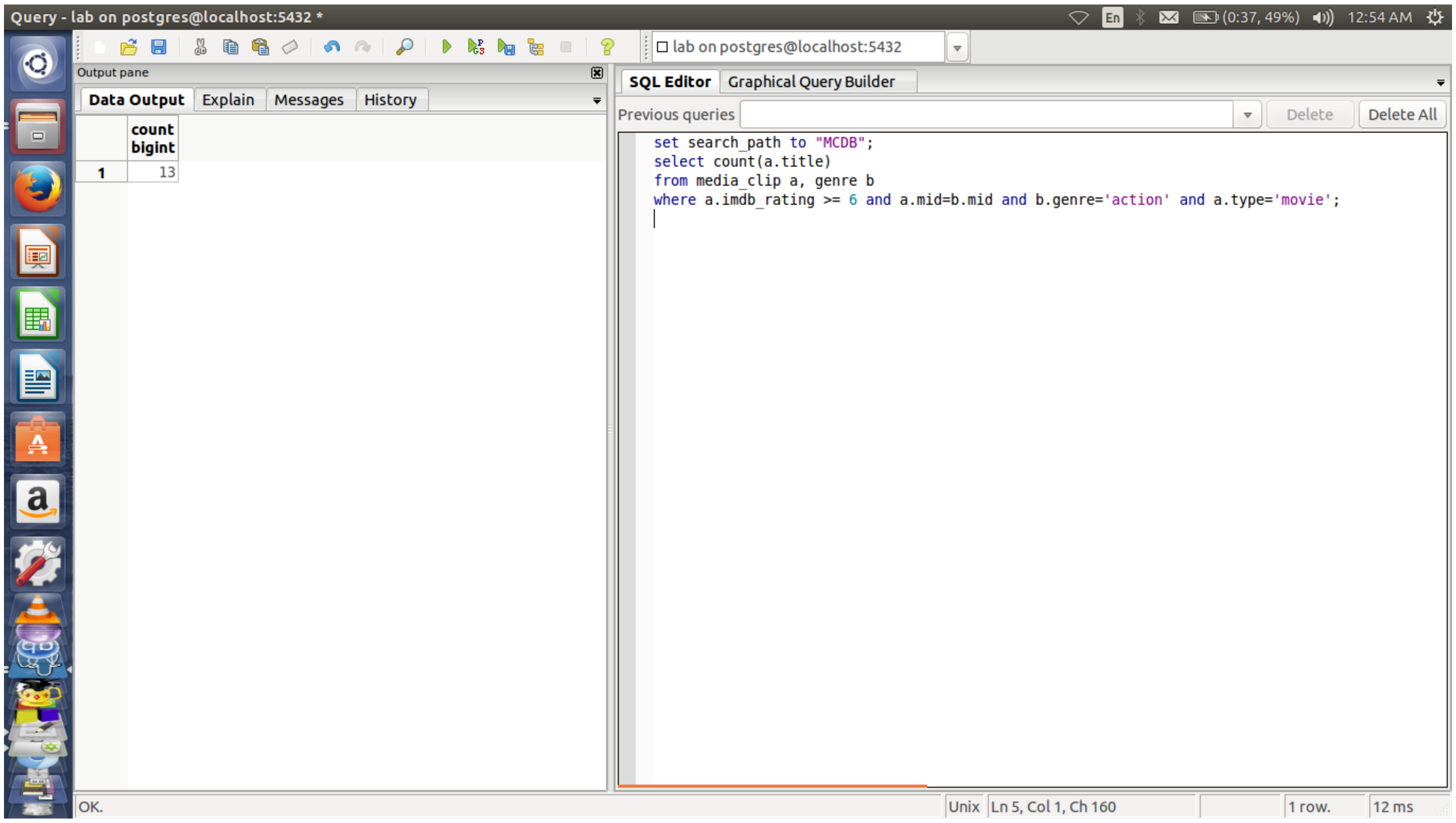
```
set search_path to "MCDB";
drop table a;

select  fname, title
from (director join cinema_professional on director.id= cinema_professional.id)as b inner join media_clip on
```

	fname character varying(50)	title character varying(100)
1	Alejandro González	Birdman
2	James Marsh	The Theory of Everyt
3	Richard Glatzer	Still Alice
4	Damien Chazelle	Whiplash
5	Curtis Hanson	8 Mile
6	Fran Walsh	The Lord of the Ring
7	Danny Boyle	Slumdog Millionaire
8	Sam Mendes	Skyfall
9	Frank Darabont	The Shawshank Redemp
10	Frank Darabont	The Walking Dead
11	Chuck Lorre	The Big Bang Theory
12	Chuck Lorre	Two and a Half Men
13	J.J. Abrams	Lost
14	Jonathan Nolan	Person of Interest
15	Michel Hazanavicius	The Artist
16	Phyllida Lloyd	The Iron Lady
17	Woody Allen	Midnight in Paris
18	Tom Hooper	The Kings Speech
19	Darren Aronofsky	Black Swan
20	Paul Webb	Selma
21	Mark Gatiss	Sherlock
22	Greg Berlanti	Arrow
23	Bruno Heller	Gotham
24	Maurissa Tancharoen	Agents of S.H.I.E.L.
25	Christopher Markus	Agent Carter
26	Vince Gilligan	Breaking Bad
27	Vince Gilligan	Better Call Saul
28	David Benioff	Game of Thrones
29	David Crane	Friends
30	James Bobin	The Muppets

OK.　Unix　Ln 6, Col 1, Ch 195　70 rows.　32 ms

5. QUESTION : count the no. of movies in genre action whose imdb rating is 6.0 or above
SQL:

```
select count(a.title)
from media_clip a, genre b
where a.imdb_rating >= 6 and a.mid=b.mid and b.genre='action' and a.type='movie';
```



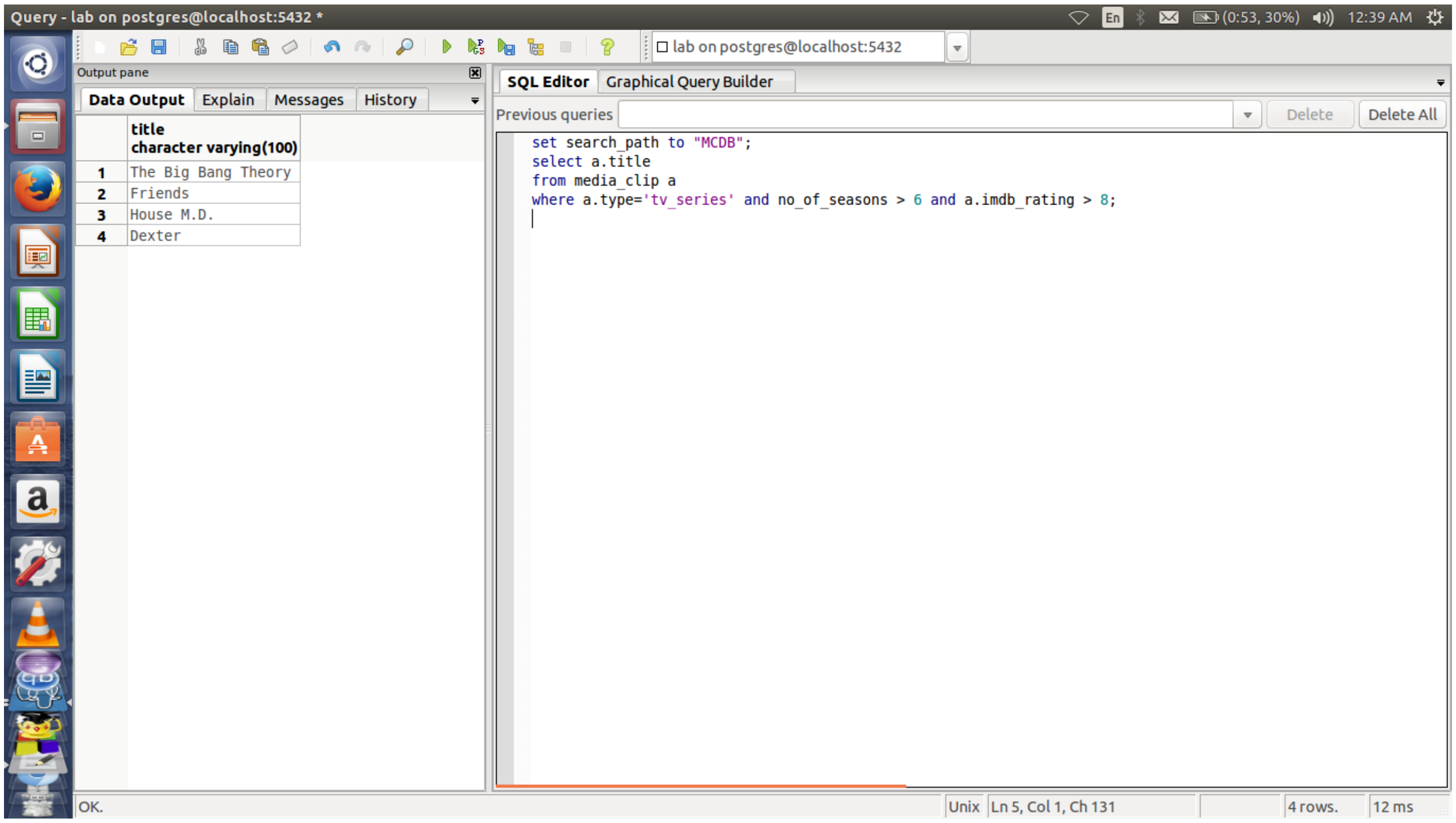
```
   count
   bigint
1      13
```

```
set search_path to "MCDB";
select count(a.title)
from media_clip a, genre b
where a.imdb_rating >= 6 and a.mid=b.mid and b.genre='action' and a.type='movie';
```

OK. Unix Ln 5, Col 1, Ch 160 1 row. 12 ms

6. QUESTION : list the tv series with no of seasons ¡6 and rating above 8
SQL:

```
select a.title
from media_clip a
where a.type='tv_series' and no_of_seasons > 6 and a.imdb_rating > 8;
```



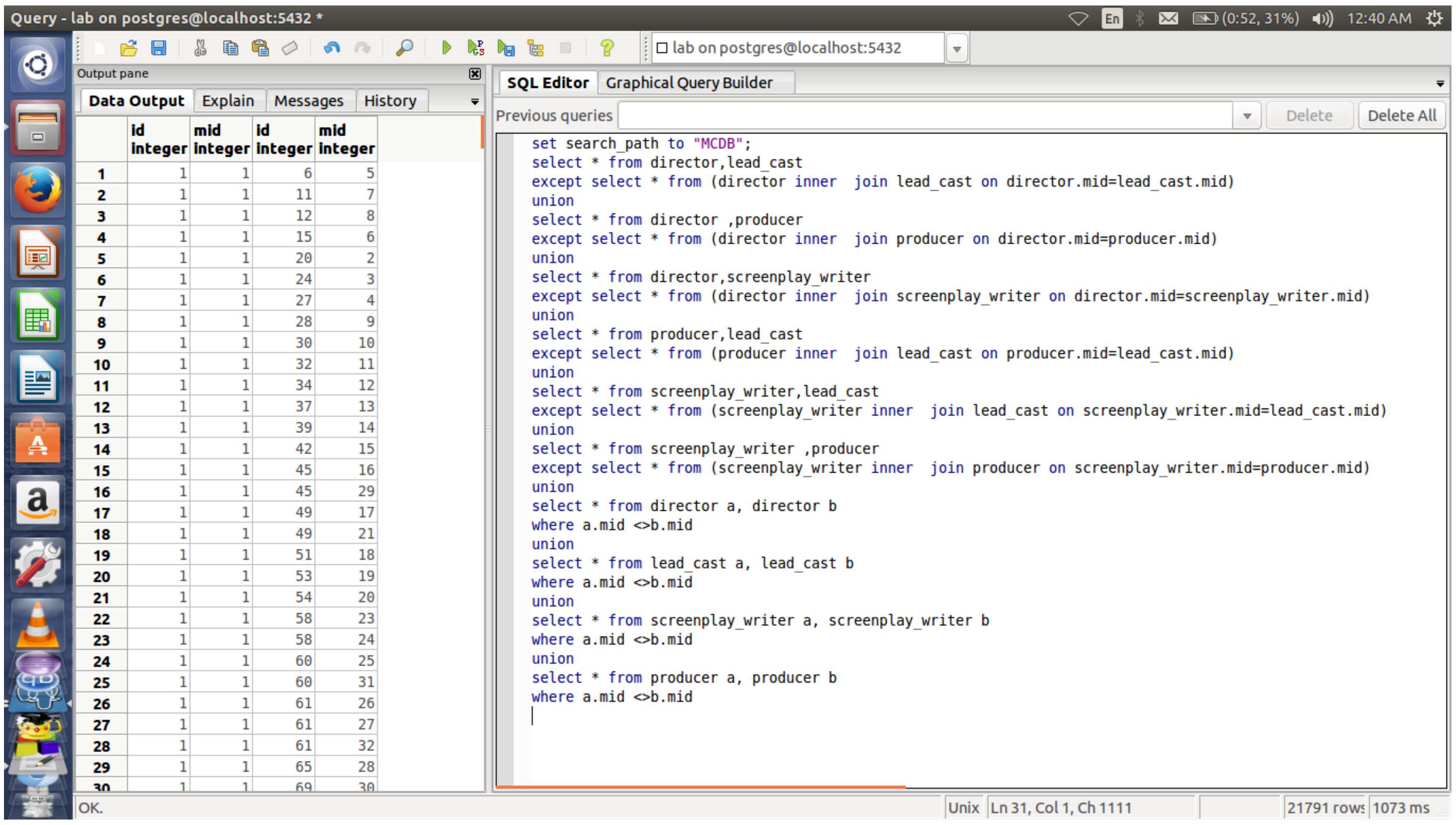
```
set search_path to "MCDB";
select a.title
from media_clip a
where a.type='tv_series' and no_of_seasons > 6 and a.imdb_rating > 8;
```

```
  title
  character varying(100)
1 The Big Bang Theory
2 Friends
3 House M.D.
4 Dexter
```

OK. Unix Ln 5, Col 1, Ch 131 4 rows. 12 ms

7. QUESTION : List the pairs of cinema professional which never worked together in a movie.
   SQL:

```sql
select * from director,lead_cast
except select * from (director inner  join lead_cast on director.mid=lead_cast.mid)
union
select * from director  ,producer
except select * from (director inner  join producer on director.mid=producer.mid)
union
select * from director,screenplay_writer
except select * from (director inner  join screenplay_writer on director.mid=
    screenplay_writer.mid)
union
select * from producer,lead_cast
except select * from (producer inner  join lead_cast on producer.mid=lead_cast.mid)
union
select * from screenplay_writer,lead_cast
except select * from (screenplay_writer inner  join lead_cast on screenplay_writer.mid=
    lead_cast.mid)
union
select * from screenplay_writer  ,producer
except select * from (screenplay_writer inner  join producer on screenplay_writer.mid=
    producer.mid)
union
select * from director a, director b
where a.mid <>b.mid
union
select * from lead_cast a, lead_cast b
where a.mid <>b.mid
union
select * from screenplay_writer a, screenplay_writer b
where a.mid <>b.mid
union
select * from producer a, producer b
where a.mid <>b.mid
```


Query - lab on postgres@localhost:5432 *

lab on postgres@localhost:5432

Output pane

Data Output | Explain | Messages | History

	id integer	mid integer	id integer	mid integer
1	1	1	6	5
2	1	1	11	7
3	1	1	12	8
4	1	1	15	6
5	1	1	20	2
6	1	1	24	3
7	1	1	27	4
8	1	1	28	9
9	1	1	30	10
10	1	1	32	11
11	1	1	34	12
12	1	1	37	13
13	1	1	39	14
14	1	1	42	15
15	1	1	45	16
16	1	1	45	29
17	1	1	49	17
18	1	1	49	21
19	1	1	51	18
20	1	1	53	19
21	1	1	54	20
22	1	1	58	23
23	1	1	58	24
24	1	1	60	25
25	1	1	60	31
26	1	1	61	26
27	1	1	61	27
28	1	1	61	32
29	1	1	65	28
30	1	1	69	30

SQL Editor | Graphical Query Builder

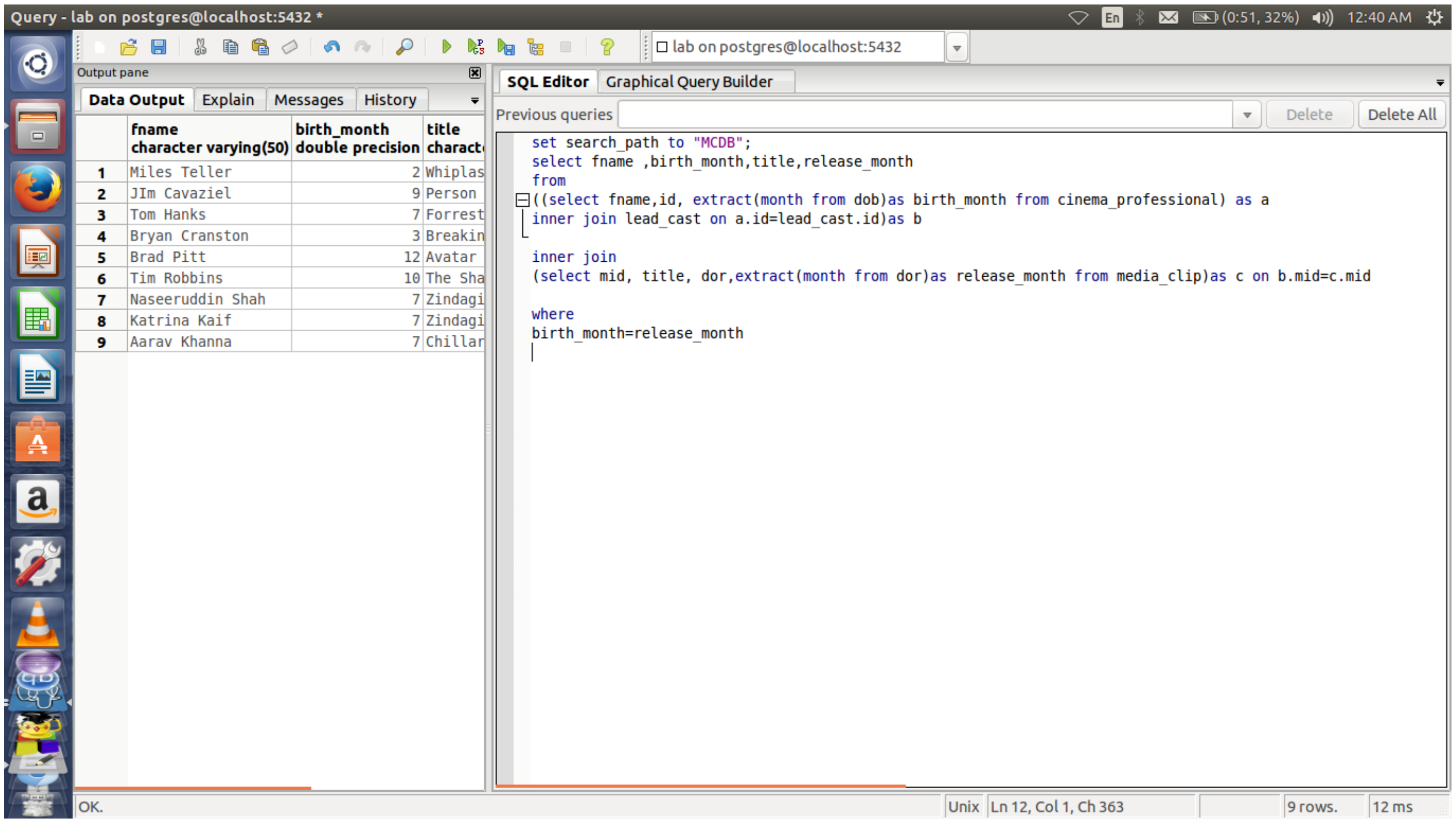
Previous queries

```sql
set search_path to "MCDB";
select * from director,lead_cast
except select * from (director inner  join lead_cast on director.mid=lead_cast.mid)
union
select * from director ,producer
except select * from (director inner  join producer on director.mid=producer.mid)
union
select * from director,screenplay_writer
except select * from (director inner  join screenplay_writer on director.mid=screenplay_writer.mid)
union
select * from producer,lead_cast
except select * from (producer inner  join lead_cast on producer.mid=lead_cast.mid)
union
select * from screenplay_writer,lead_cast
except select * from (screenplay_writer inner  join lead_cast on screenplay_writer.mid=lead_cast.mid)
union
select * from screenplay_writer ,producer
except select * from (screenplay_writer inner  join producer on screenplay_writer.mid=producer.mid)
union
select * from director a, director b
where a.mid <>b.mid
union
select * from lead_cast a, lead_cast b
where a.mid <>b.mid
union
select * from screenplay_writer a, screenplay_writer b
where a.mid <>b.mid
union
select * from producer a, producer b
where a.mid <>b.mid
```

```
OK.    Unix    Ln 31, Col 1, Ch 1111    21791 rows    1073 ms
```

8. QUESTION : Name the lead cast having the movie release date in his birth month.
SQL:

```
set search_path to "MCDB";
select fname ,birth_month,title,release_month
from
((select fname,id, extract(month from dob)as birth_month from cinema_professional) as a
inner join lead_cast on a.id=lead_cast.id)as b

inner join
(select mid, title, dor,extract(month from dor)as release_month from media_clip)as c on b.mid
    =c.mid

where
birth_month=release_month
```



Query - lab on postgres@localhost:5432 *

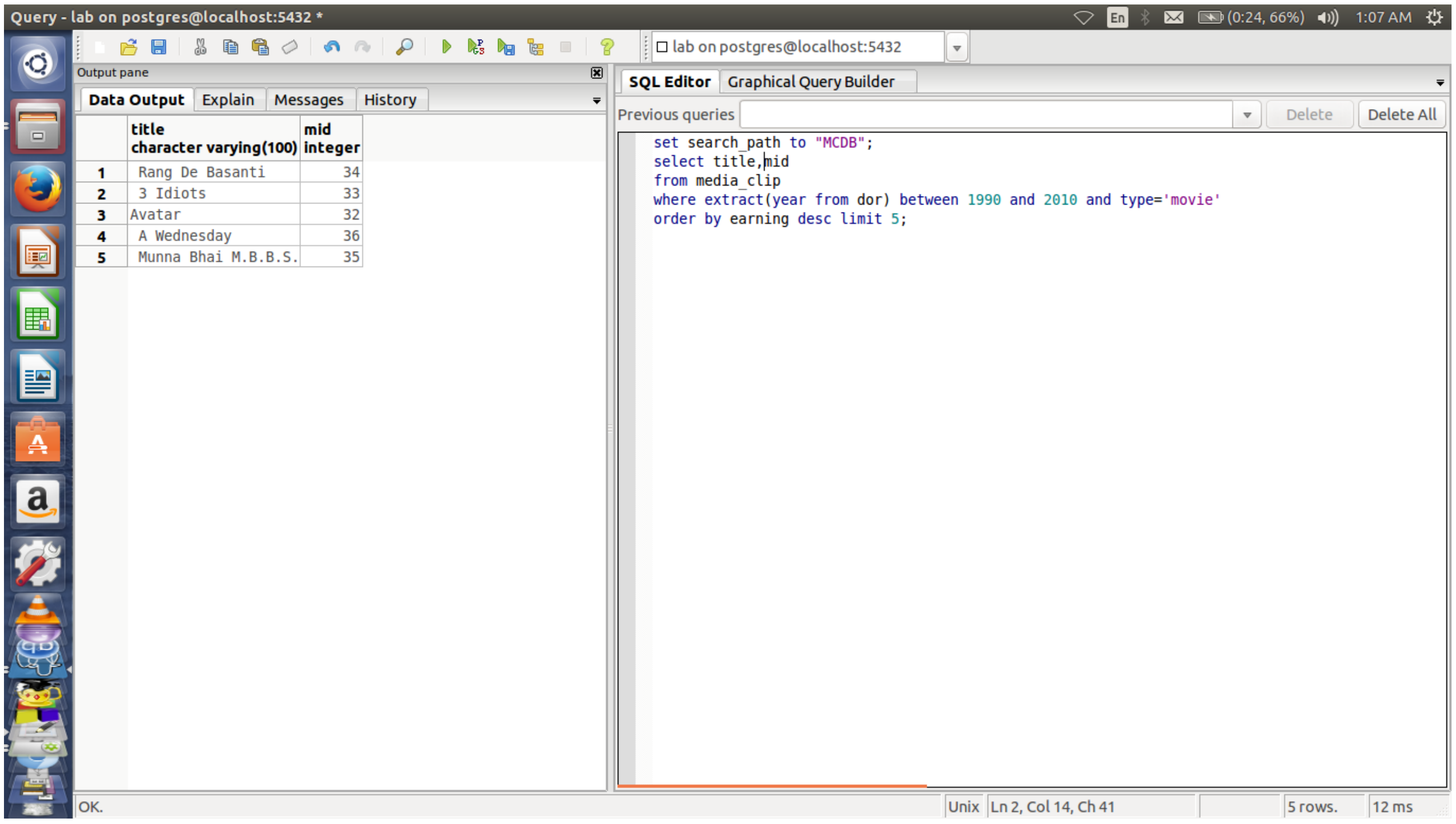
	fname character varying(50)	birth_month double precision	title characte
1	Miles Teller	2	Whiplas
2	JIm Cavaziel	9	Person
3	Tom Hanks	7	Forrest
4	Bryan Cranston	3	Breakin
5	Brad Pitt	12	Avatar
6	Tim Robbins	10	The Sha
7	Naseeruddin Shah	7	Zindagi
8	Katrina Kaif	7	Zindagi
9	Aarav Khanna	7	Chillar

```
set search_path to "MCDB";
select fname ,birth_month,title,release_month
from
((select fname,id, extract(month from dob)as birth_month from cinema_professional) as a
inner join lead_cast on a.id=lead_cast.id)as b

inner join
(select mid, title, dor,extract(month from dor)as release_month from media_clip)as c on b.mid=c.mid

where
birth_month=release_month
```

OK. Unix Ln 12, Col 1, Ch 363 9 rows. 12 ms

9. QUESTION : list the top 5 grossing movies from year 1990 to 2010
SQL:

```sql
set search_path to "MCDB";
select title,earning,mid
from media_clip
where extract(year from dor) between 1990 and 2010 and type='movie'
order by earning desc limit=5
```



Query - lab on postgres@localhost:5432 *

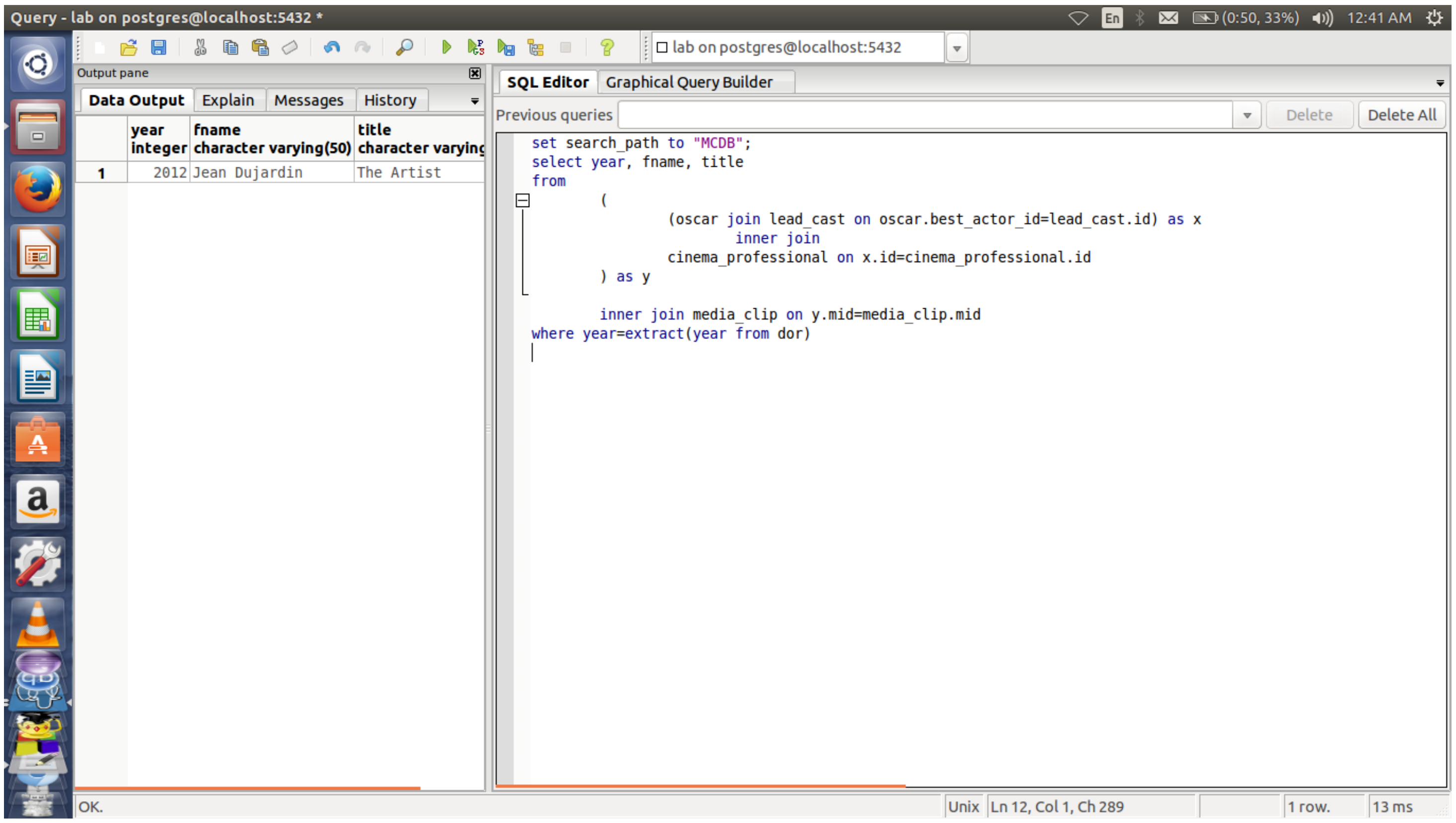
```sql
set search_path to "MCDB";
select title,mid
from media_clip
where extract(year from dor) between 1990 and 2010 and type='movie'
order by earning desc limit 5;
```

	title character varying(100)	mid integer
1	Rang De Basanti	34
2	3 Idiots	33
3	Avatar	32
4	A Wednesday	36
5	Munna Bhai M.B.B.S.	35

OK. Unix Ln 2, Col 14, Ch 41 5 rows. 12 ms

10. QUESTION : list all the best actor and their movies/tvseries in that particular year
SQL:

```
set search_path to "MCDB";
select year, fname, title
from
 (
  (oscar join lead_cast on oscar.best_actor_id=lead_cast.id) as x
   inner join
  cinema_professional on x.id=cinema_professional.id
 ) as y

 inner join media_clip on y.mid=media_clip.mid
where year=extract(year from dor)
```

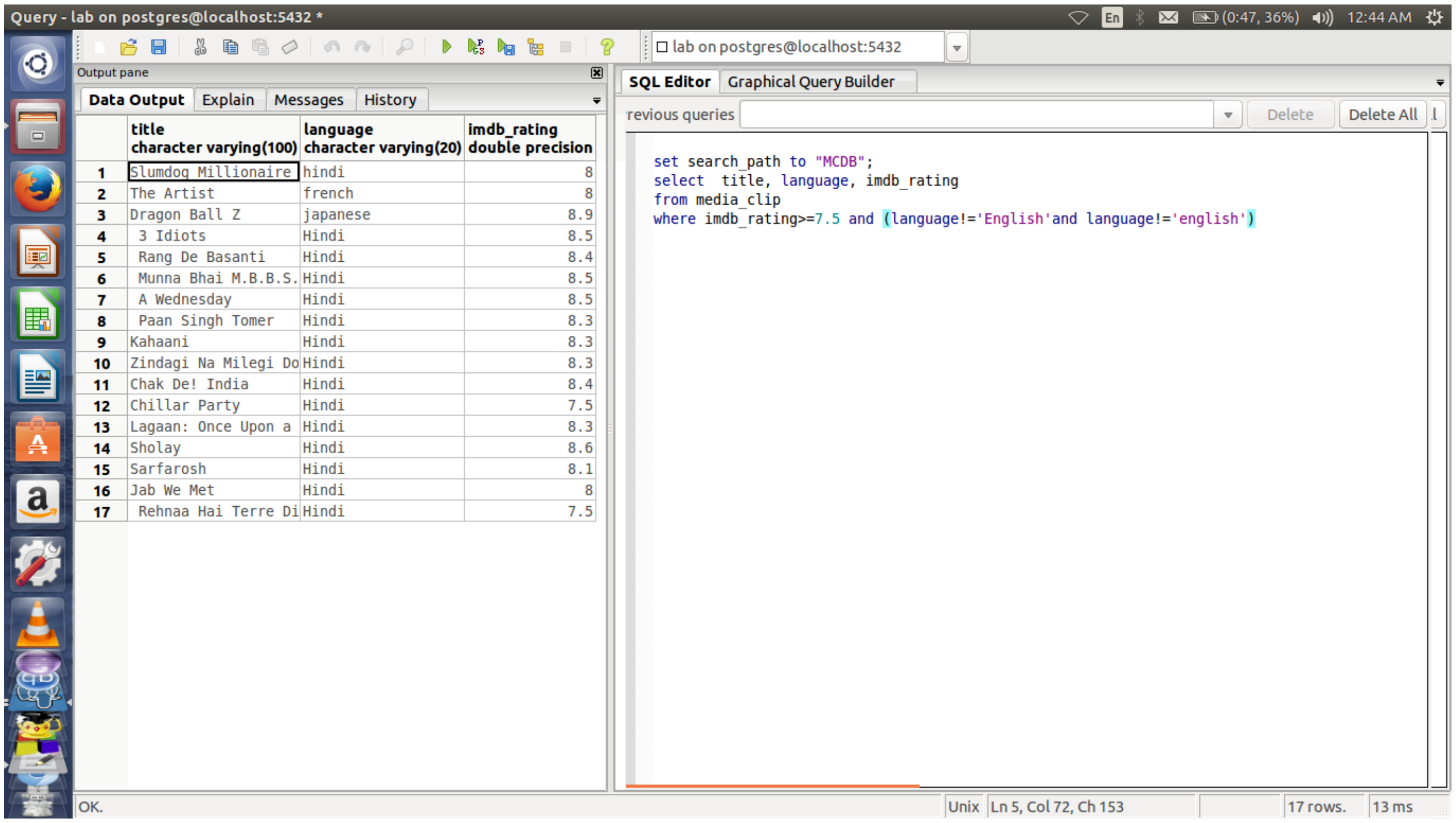


```
   year     fname                    title
   integer  character varying(50)    character varying
1  2012     Jean Dujardin            The Artist
```

```
set search_path to "MCDB";
select year, fname, title
from
        (
                (oscar join lead_cast on oscar.best_actor_id=lead_cast.id) as x
                        inner join
                cinema_professional on x.id=cinema_professional.id
        ) as y

        inner join media_clip on y.mid=media_clip.mid
where year=extract(year from dor)
```

11. QUESTION : List the films and tv series with language other than english and imdb rating above 7.5
SQL:

```
set search_path to "MCDB";
select  title, language, imdb_rating
from media_clip
where imdb_rating>=7.5 and language!='English'
```



Query - lab on postgres@localhost:5432 *

	title character varying(100)	language character varying(20)	imdb_rating double precision
1	Slumdog Millionaire	hindi	8
2	The Artist	french	8
3	Dragon Ball Z	japanese	8.9
4	3 Idiots	Hindi	8.5
5	Rang De Basanti	Hindi	8.4
6	Munna Bhai M.B.B.S.	Hindi	8.5
7	A Wednesday	Hindi	8.5
8	Paan Singh Tomer	Hindi	8.3
9	Kahaani	Hindi	8.3
10	Zindagi Na Milegi Do	Hindi	8.3
11	Chak De! India	Hindi	8.4
12	Chillar Party	Hindi	7.5
13	Lagaan: Once Upon a	Hindi	8.3
14	Sholay	Hindi	8.6
15	Sarfarosh	Hindi	8.1
16	Jab We Met	Hindi	8
17	Rehnaa Hai Terre Di	Hindi	7.5

```
set search_path to "MCDB";
select  title, language, imdb_rating
from media_clip
where imdb_rating>=7.5 and (language!='English'and language!='english')
```

OK. Unix Ln 5, Col 72, Ch 153 17 rows. 13 ms

Functional dependencies of different entity or relation

Oscar

year	best song title	best screenplay id	best actor id	best actress id	best director id	best movie id

FD's

year $\rightarrow$ best song title
year $\rightarrow$ best screenplay id
year $\rightarrow$ best actor id
year $\rightarrow$ best actress id
year $\rightarrow$ best director id
year $\rightarrow$ best movie id

Media Clip

MId	Type	Title	Date of release	Imdb_Rating	Language	Duration	Earnings	No of season

FD's

Mid $\rightarrow$ Type
Mid $\rightarrow$ Title
Mid $\rightarrow$ Date of release
Mid $\rightarrow$ Imdb_Rating
Mid $\rightarrow$ Language
Mid $\rightarrow$ Duration
Mid $\rightarrow$ Earnings
Mid $\rightarrow$ No of season

Cinema profession

Id	Name	Sex	Date of birth	Country

FD's

Id $\rightarrow$ Name
Id $\rightarrow$ Sex
Id $\rightarrow$ Date of birth
Id $\rightarrow$ Country

Genre

Mid	genre

FD's

Mid $\rightarrow$ genre

Director

Mid	ID

FD's

{Mid,Id} $\rightarrow$ {Mid,Id}

Producer

Mid	ID

FD's

{Mid,Id} $\rightarrow$ {Mid,Id}

Screenplay writor

Mid	ID

FD's

{Mid,Id} $\rightarrow$ {Mid,Id}

Lead Cast

Mid	ID

FD's

{Mid,Id} $\rightarrow$ {Mid,Id}

Singer

song_title	ID

FD's

{song_title,Id} $\rightarrow$ {song_title,Id}

Song

$\underline{\text{MId}}$	$\underline{\underline{\text{song\_title}}}$	Id

FD's

{Mid,song_title} $\rightarrow$ song_title