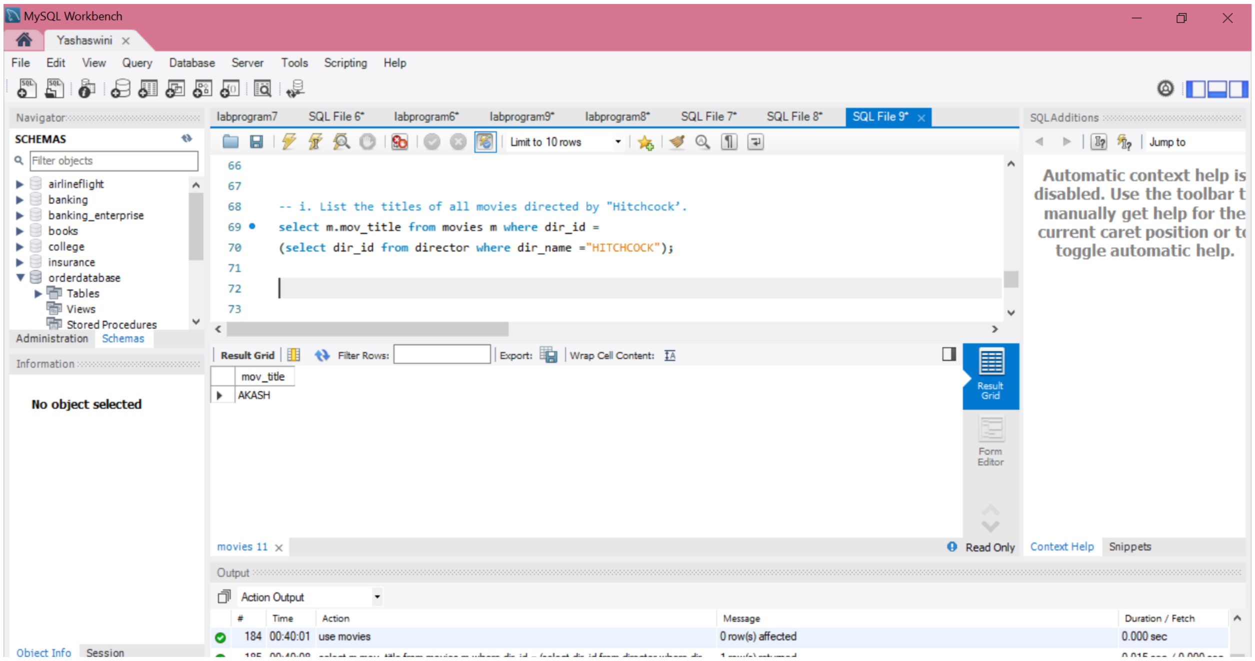
USN:1BM19CS216

PROGRAM 9 : MOVIE DATABASE

Consider the schema for Movie Database:
ACTOR(Act_id, Act_Name, Act_Gender)
DIRECTOR(Dir_id, Dir_Name, Dir_Phone)
MOVIES(Mov_id, Mov_Title, Mov_Year, Mov_Lang, Dir_id)
MOVIE_CAST(Act_id, Mov_id, Role)
RATING(Mov_id, Rev_Stars)
Write SQL queries to
i. List the titles of all movies directed by ‘Hitchcock’.
ii. Find the movie names where one or more actors acted in two or more movies.
iii. List all actors who acted in a movie before 2000 and also in a movie after 2015 (use JOIN operation).
iv. Find the title of movies and number of stars for each movie that has at least one rating and find the highest number of stars that movie received. Sort the result by movie title.
v. Update rating of all movies directed by ‘Steven Spielberg’ to 5.

```
create database movies;
use movies;

create table Actor(
act_id int,
act_name varchar(30),
act_gender varchar(1),
constraint act_id primary key (act_id)
);
create table Director(
dir_id int,
dir_name varchar(30),
dir_phone varchar(30),
constraint dir_id primary key (dir_id)
);
create table Movies(
mov_id int,
mov_title varchar(30),
mov_year varchar(4),
mov_lang varchar(12),
dir_id int ,
constraint mov_id primary key (mov_id),
constraint mov_id foreign key (dir_id) references director(dir_id)
);
create table movie_cast (
act_id int,
mov_id int,
role varchar(10),
constraint mov_pr primary key(act_id ,mov_id),
constraint mov_act foreign key (act_id) references actor(act_id),
constraint mov_mov foreign key (mov_id) references movies(mov_id)
);
create table rating (
mov_id int ,
rev_stars varchar(25),
constraint rat primary key (mov_id),
constraint rat_mov foreign key (mov_id) references movies(mov_id));

insert into actor values (301,'anushka','f');
insert into actor values (302,'prabhas','m');
insert into actor values (303,'punith','m');
insert into actor values (304,'jeremy','m');

INSERT INTO DIRECTOR VALUES (60,"RAJAMOULI", 8751611001);
INSERT INTO DIRECTOR VALUES (61,"HITCHCOCK", 7766138911);
INSERT INTO DIRECTOR VALUES (62,"FARAN", 9986776531);
INSERT INTO DIRECTOR VALUES (63,"STEVEN SPIELBERG", 8989776530);

INSERT INTO MOVIES VALUES (1001,"BAHUBALI-2", 2017, "TELAGU", 60);
INSERT INTO MOVIES VALUES (1002,"BAHUBALI-1", 2015, "TELAGU", 60);
INSERT INTO MOVIES VALUES (1003,"AKASH", 2008, "KANNADA", 61);
INSERT INTO MOVIES VALUES (1004,"WAR HORSE", 2011, "ENGLISH", 63);

INSERT INTO MOVIE_CAST VALUES (301, 1002, "HEROINE");
INSERT INTO MOVIE_CAST VALUES (301, 1001, "HEROINE");
INSERT INTO MOVIE_CAST VALUES (303, 1003, "HERO");
INSERT INTO MOVIE_CAST VALUES (303, 1002, "GUEST");
INSERT INTO MOVIE_CAST VALUES (304, 1004, "HERO");
INSERT INTO MOVIE_CAST VALUES (301, 1005, "HEROINE");
INSERT INTO MOVIE_CAST VALUES (303, 1005, "HERO");

INSERT INTO RATING VALUES (1001, 4);
INSERT INTO RATING VALUES (1002, 2);
INSERT INTO RATING VALUES (1003, 5);
INSERT INTO RATING VALUES (1004, 4);

-- i. List the titles of all movies directed by "Hitchcock’.
select m.mov_title from movies m where dir_id = (select dir_id from director where dir_name
="HITCHCOCK");
```

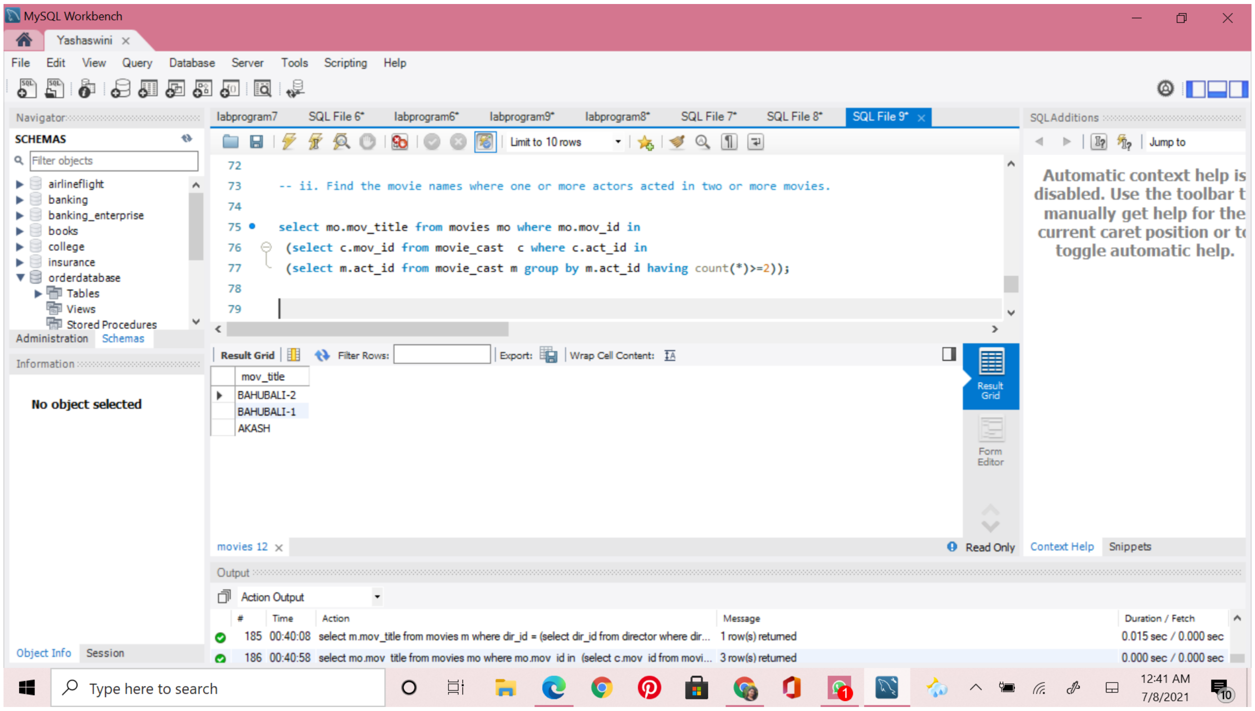


```
-- i. List the titles of all movies directed by "Hitchcock'.
select m.mov_title from movies m where dir_id =
(select dir_id from director where dir_name ="HITCHCOCK");
```

mov_title
AKASH

```
#    Time      Action        Message            Duration / Fetch
184  00:40:01  use movies    0 row(s) affected  0.000 sec
```

-- ii. Find the movie names where one or more actors acted in two or more movies.
select mo.mov_title from movies mo where mo.mov_id in (select c.mov_id from movie_cast c where c.act_id in (select m.act_id from movie_cast m group by m.act_id having count(*)>=2));



```
-- ii. Find the movie names where one or more actors acted in two or more movies.

select mo.mov_title from movies mo where mo.mov_id in
 (select c.mov_id from movie_cast  c where c.act_id in
 (select m.act_id from movie_cast m group by m.act_id having count(*)>=2));
```

mov_title
BAHUBALI-2
BAHUBALI-1
AKASH

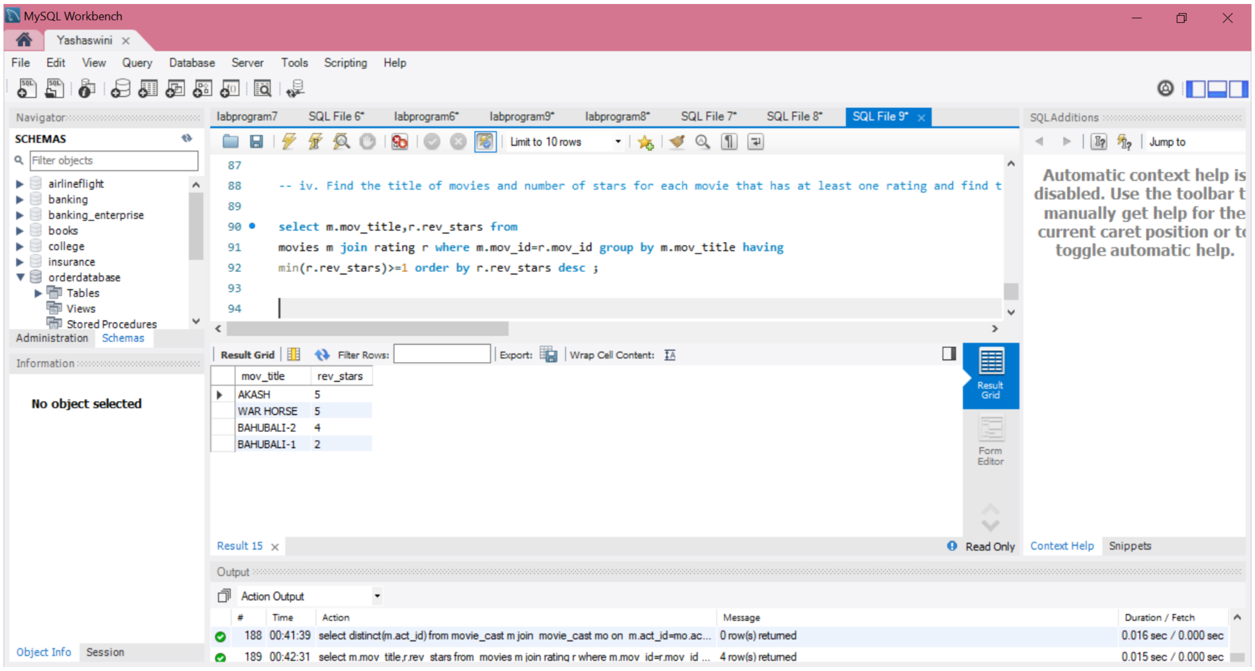
```
#    Time      Action                                                                          Message            Duration / Fetch
185  00:40:08  select m.mov_title from movies m where dir_id = (select dir_id from director where dir...  1 row(s) returned  0.015 sec / 0.000 sec
186  00:40:58  select mo.mov_title from movies mo where mo.mov_id in  (select c.mov_id from movi...   3 row(s) returned  0.000 sec / 0.000 sec
```

-- iii. List all actors who acted in a movie before 2000 and also in a movie after 2015 (use JOIN operation).

select distinct(m.act_id) from movie_cast m join movie_cast mo on m.act_id=mo.act_id and m.mov_id!=mo.mov_id where m.mov_id in (select mo.mov_id from movies mo where mo.mov_year>=2015) and mo.mov_id in (select mo.mov_id from movies mo where mo.mov_year<2000);

-- iv. Find the title of movies and number of stars for each movie that has at least one rating and find the highest number of stars that movie received. Sort the result by movie title.

select m.mov_title,r.rev_stars from movies m join rating r where m.mov_id=r.mov_id group by m.mov_title having min(r.rev_stars)>=1 order by r.rev_stars desc ;



```
-- iv. Find the title of movies and number of stars for each movie that has at least one rating and find t

select m.mov_title,r.rev_stars from
movies m join rating r where m.mov_id=r.mov_id group by m.mov_title having
min(r.rev_stars)>=1 order by r.rev_stars desc ;
```

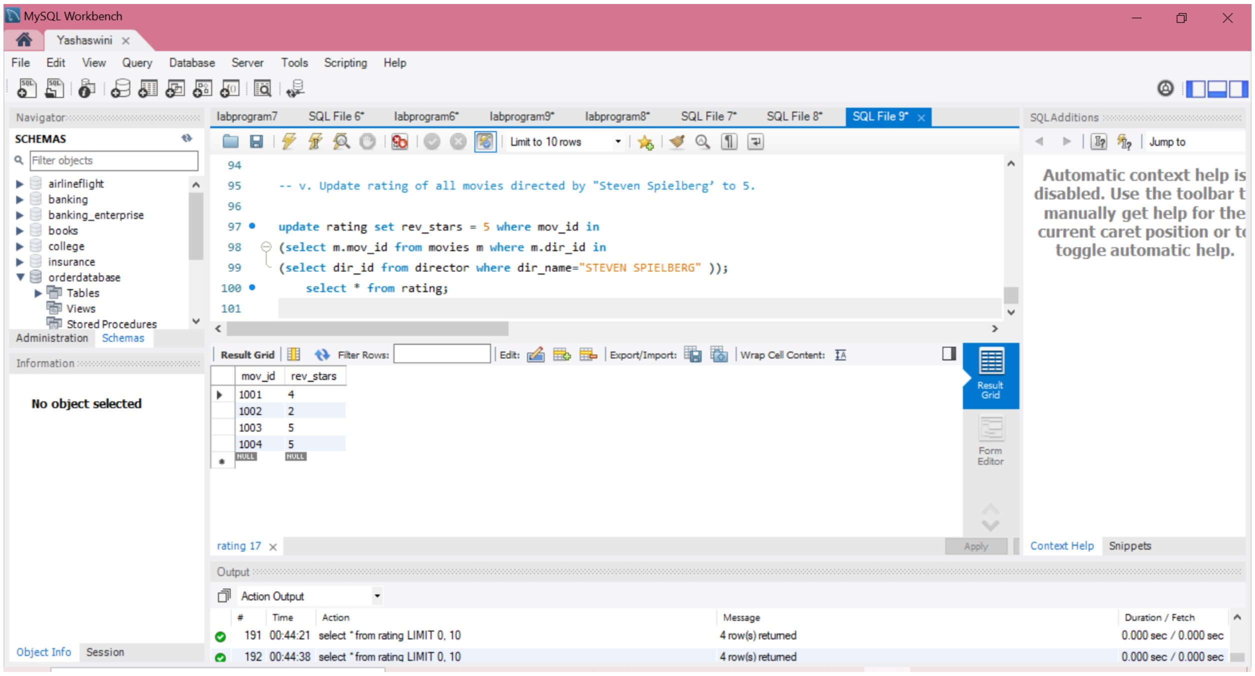
mov_title	rev_stars
AKASH	5
WAR HORSE	5
BAHUBALI-2	4
BAHUBALI-1	2

```
    #    Time      Action                                                                   Message            Duration / Fetch
✓  188  00:41:39  select distinct(m.act_id) from movie_cast m join  movie_cast mo on  m.act_id=mo.ac...  0 row(s) returned  0.016 sec / 0.000 sec
✓  189  00:42:31  select m.mov_title,r.rev_stars from  movies m join rating r where m.mov_id=r.mov_id ...  4 row(s) returned  0.015 sec / 0.000 sec
```

-- v. Update rating of all movies directed by "Steven Spielberg’ to 5.

update rating set rev_stars = 5 where mov_id in (select m.mov_id from movies m where m.dir_id in (select dir_id from director where dir_name="STEVEN SPIELBERG"));

select * from rating;



MySQL Workbench
Yashaswini
File Edit View Query Database Server Tools Scripting Help
Navigator
SCHEMAS
Filter objects
airlineflight
banking
banking_enterprise
books
college
insurance
orderdatabase
Tables
Views
Stored Procedures
Administration Schemas
Information
No object selected
Object Info Session
labprogram7 SQL File 6* labprogram6* labprogram9* labprogram8* SQL File 7* SQL File 8* SQL File 9*
Limit to 10 rows
Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:
Result Grid
Form Editor
rating 17
Apply
SQL Additions
Jump to
Automatic context help is disabled. Use the toolbar t manually get help for the current caret position or to toggle automatic help.
Context Help Snippets
Output
Action Output

```
-- v. Update rating of all movies directed by "Steven Spielberg’ to 5.

update rating set rev_stars = 5 where mov_id in
(select m.mov_id from movies m where m.dir_id in
(select dir_id from director where dir_name="STEVEN SPIELBERG" ));
    select * from rating;
```

mov_id	rev_stars
1001	4
1002	2
1003	5
1004	5
NULL	NULL

#	Time	Action	Message	Duration / Fetch
191	00:44:21	select * from rating LIMIT 0, 10	4 row(s) returned	0.000 sec / 0.000 sec
192	00:44:38	select * from rating LIMIT 0, 10	4 row(s) returned	0.000 sec / 0.000 sec