

## SBA5

A XYZ corporation is a organization where they are designing database as per the requirement below cases should be satisfied.

1. Create Database project\_movie\_data and deploy table data according to ER diagram.

```
create database project_movie_data;
```

```
use project_movie_data;
```

2. Create 9 tables which are presented in ER model and load the data with their foreign key and primary key values.

```
create table actor(  
  act_id int primary key auto_increment,  
  act_fname varchar(45),  
  act_lname varchar(45),  
  act_gender enum('M','F')  
)auto_increment=101;
```

```
create table director(  
  dir_id int primary key auto_increment,  
  dir_fname varchar(45),  
  dir_lname varchar(45)  
)auto_increment=201;  
select * from director;  
create table movie_direction(  
  dir_id int not null,  
  mov_id int not null,  
  foreign key(dir_id) references director(dir_id),  
  foreign key(mov_id) references movie(mov_id)  
);  
create table movie_cast(  
  act_id int not null,  
  mov_id int not null,  
  role varchar(30),
```

```
foreign key(act_id) references actor(act_id)
```

```
foreign key(mov_id) references movie(mov_id)
```

```
);
```

```
create table movie(
```

```
  mov_id int primary key auto_increment,
```

```
  mov_title varchar(50),
```

```
  mov_year int not null,
```

```
  mov_time int not null,
```

```
  mov_lang varchar(50) not null,
```

```
  mov_dt_rel date,
```

```
  mov_rel_country varchar(10)
```

```
)auto_increment=901;
```

```
create table reviewer(
```

```
  rev_id int primary key auto_increment,
```

```
  rev_name varchar(30)
```

```
)auto_increment=9001;
```

```
create table genres(
```

```
  gen_id int primary key auto_increment,
```

```
  gen_title varchar(20)
```

```
)auto_increment=1001;
```

```
create table movie_genres(
```

```
  mov_id int not null,
```

```
  gen_id int not null,
```

```
  foreign key(mov_id) references movie(mov_id),
```

```
  foreign key(gen_id) references genres(gen_id)
```

```
);
```

```
create table rating(  
  mov_id int not null,  
  rev_id int not null,  
  rev_stars int,  
  num_o_ratings int,  
  foreign key(mov_id) references movie(mov_id),  
  foreign key(rev_id) references reviewer(rev_id) );
```

```
show tables;
```

```
INSERT INTO director(dir_fname,dir_lname)  
values('Alfred','Hitchcock'),('Jack','Clayton'),('David','Lean'),  
('Michael','Cimino'),('Milos','Forman'),('Ridley','Scott'),  
('Stanley','Kubrick'),('Bryan','Singer'),('Roman','Polanski'),  
('Paul','Thomas Anderson'),('Woody','Allen'),('Hayao','Miyazaki'),  
('Frank','Darabont'),('Sam','Mendes'),('James','Cameron'),  
('Gus','Van Sant'),('John','Boorman'),('Danny','Boyle'),  
('Christopher','Nolan'),('Richard','Kelly'),('Kevin','Spacey'),  
('Andrei','Tarkovsky'),('Peter','Jackson');  
select * from director;
```

```
insert into movie(mov_title,mov_year,mov_time,mov_lang,mov_dt_rel,mov_rel_country)  
values('Vertigo',1958,128,'English','1958-08-24','UK'),('The Innocents',1961,100,'English','1962-02-  
19','SW'),  
('Lawrence of Arabia',1962,216,'English','1962-12-11','UK'),('The Deer Hunter',1978,183,'English','1979-  
03-08','UK'),  
('Amadeus',1984,160,'English','1985-01-07','UK'),('Blade Runner',1982,117,'English','1982-09-09','UK'),  
('Eyes Wide Shut',1999,159,'English',null,'UK'),('The Usual Suspects',1995,106,'English','1995-08-  
09','UK'),
```

('Chinatown',1974,130,'English','1974-08-09','UK'),('Boogie Nights',1997,155,'English','1998-02-16','UK'),('Annie Hall',1977,93,'English','1977-04-20','USA'),  
 ('Princess Mononoke',1997,134,'Japanese','2001-10-19','UK'),('The Shawshank Redemption','1994','142','English','1995-02-17','UK'),('American Beauty',1999,122,'English',null,'UK'),  
 ('Titanic',1997,194,'English','1998-01-23','UK'),('Good Will Hunting',1997,126,'English','1998-06-03','UK'),('Deliverance',1972,109,'English','1982-10-05','UK'),  
 ('Trainspotting',1996,94,'English','1996-02-23','UK'),('The Prestige',2006,130,'English','2006-11-10','UK'),('Donnie Darko',2001,113,'English',null,'UK'),  
 ('Slumdog Millionaire',2008,120,'English','2009-01-09','UK'),('Aliens',1986,137,'English','1986-08-29','UK'),('Beyond the Sea',2004,118,'English','2004-11-26','UK'),  
 ('Avatar',2009,162,'English','2009-12-17','UK'),('Seven Samurai',1954,207,'Japanese','1954-04-26','JP'),('Spirited Away',2001,125,'Japanese','2003-09-12','UK'),  
 ('Back to the Future',1985,116,'English','1985-12-04','UK'),('Braveheart',1995,178,'English','1995-09-08','UK');

insert into movie\_direction(dir\_id,mov\_id)

values(201,901),(202,902),(203,903),  
 (204,904),(205,905),(206,906),  
 (207,907),(208,908),(209,909),  
 (210,910),(211,911),(212,912),  
 (213,913),(214,914),(215,915),  
 (216,916),(217,917),(218,918),  
 (219,919),(220,920),(218,921),  
 (215,922),(221,923);

insert into genres(gen\_title)

values('Action'),('Adventure'),('Animation'),('Biography'),  
 ('Comedy'),('Crime'),('Drama'),('Horror'),  
 ('Music'),('Mystery'),('Romance'),('Thriller'),  
 ('War');

insert into actor(act\_fname,act\_lname,act\_gender)

```

values('James','Stewart','M'),('Deborah','Kerr','F'),('Peter','Otoole','M'),('Robert','DeNiro','M'),
('F.Murray','Abraham','M'),('Harrison','Ford','M'),('Nicole','Kidman','F'),('Stephen','Baldwin','M'),
('Jack','Nicholson','M'),('Mark','Wahlberg','M'),('Woody','Allen','M'),('Claire','Danes','F'),
('Tim','Robbins','M'),('Jon','Voight','M'),('Kevin','Spacey','M'),('Kate','Winslet','F'),('Robin','Robbins','M'),
('Ewan','McGregor','M'),('Christian','Bale','M'),('Maggie','Gyllenhaal','F'),('Dev','Patel','M'),('Sigourney','W
eaver','F'),
('David','Aston','M'),('Ali','Astin','F');

```

```

insert into movie_cast(act_id,mov_id,role)

```

```

values(101,901,'John Scottie Ferguson'),(102,902,'Miss
Giddens'),(103,903,'T.F.Lawrence'),(104,904,'Michael'),
(105,905,'Antonia Salieri'),(106,906,'Rick Deckard'),(107,907,'Alice Harford'),(108,908,'McManus'),
(110,910,'Eddie Adams'),(111,911,'Alvy Singer'),(112,912,'San'),(113,913,'Andy
Dulresne'),(114,914,'Lester Burnham'),
(115,915,'Rose DeWitt Bukater'),(116,916,'Sean
Maguire'),(117,917,'Ed'),(118,918,'Renton'),(120,920,'Elizabeth Darko'),
(121,921,'Older Jamal'),(122,922,'Ripley'),(114,923,'Bobby Darin'),(109,909,'J.J.Gittes'),(119,919,'Alfred
Borden');

```

```

insert into reviewer(rev_name)

```

```

values('Righty sock'),('Jack Malven'),('Flagrant Malvern'),('Alec Shaw'),
(null),('Victor Woeltjen'),('Simon Wright'),('Neal Wruck'),
('Paul Monks'),('Mike Salvati'),(null),('Weasly S.Walker'),
('Sasha Goldshtein'),('Josh Cates'),('Krug Stillo'),('Scott LeBrun'),
('Hannah Steele'),('Vincent Cadena'),('Brandt Sponseller'),('Richard Adams');

```

```

insert into movie_genres(mov_id,gen_id)

```

```

values(922,1001),(917,1002),(903,1002),(912,1003),(911,1005),(908,1006),(913,1006),(926,1007),(928,1
007),(918,1007),
(921,1007),(902,1008),(923,1009),(907,1010),(927,1010),(901,1010),(914,1011),(906,1012),(904,1013);

```

```

insert into rating(mov_id,rev_id,rev_stars,num_o_ratings)

```

```
values(901,9001,8.4,263575),(902,9002,7.9,20207),(903,9003,8.3,202778),(906,9005,8.2,484746),
(924,9006,7.3,null),(908,9007,8.6,779489),(909,9008,null,227235),(910,9009,3,195961),
(911,9010,8.1,203875),(912,9011,8.4,null),(914,9013,7,862618),(915,9001,7.7,830095),
(916,9014,4,642132),(925,9015,7.7,81328),(918,9016,null,580301),(920,9017,8.1,609451),
(921,9018,8,667758),(922,9019,8.4,511613),(923,9020,6.7,13091);
```

### 3. Write a query in SQL to list the Horror movies?

```
select mov_title,gen_title from movie
inner join movie_genres on movie.mov_id=movie_genres.mov_id
inner join genres on genres.gen_id=movie_genres.gen_id
where genres.gen_title='Horror';
```

### 4. Write a query in SQL to find the name of all reviewers who have rated 8 or more stars?

```
select rev_name,rev_stars from reviewer
inner join rating on reviewer.rev_id=rating.rev_id
where rev_stars>=8;
```

### 5. Write a query in SQL to list all the information of the actors who played a role in the movie 'Deliverance'

```
select act_fname,act_lname,act_gender,mov_title from actor
inner join movie_cast on actor.act_id=movie_cast.act_id
inner join movie on movie_cast.mov_id=movie.mov_id
where movie.mov_title='Deliverance';
```

### 8. Write a query in SQL to find all the years which produced at least one movie and that received a rating of more than 4 stars.

```
select mov_title,rev_stars,mov_year from movie
inner join rating on movie.mov_id=rating.mov_id
where rev_stars>=4;
```

### 10. Write a query in SQL to find the name of movies who were directed by 'David'

```
select mov_title,dir_fname,dir_lname from movie
inner join movie_direction on movie.mov_id=movie_direction.mov_id
```

```
inner join director on movie_direction.dir_id=director.dir_id  
where director.dir_fname='David' or director.dir_lname='David';
```

11. Write a query in SQL to list the first and last names of all the actors who were cast in the movie 'Boogie Nights', and the roles they played in that production.

```
select act_fname,act_lname,mov_title,role from actor  
inner join movie_cast on actor.act_id=movie_cast.act_id  
inner join movie on movie_cast.mov_id=movie.mov_id  
where movie.mov_title='Boogie Nights';
```

