**Solution to queries and updates in SQL assignment**

The cinema database has the following schema:

*movie: title, director, actor*
*schedule: theater, title, phone*

Formulate and execute the following queries using SQL:

1. List the titles of all movies playing at the Cove.

   **select** title
   **from** schedule
   **where** theater = 'Cove'

2. List the titles and directors of all movies playing at the Cove.

   **select** movie.title, movie.director
   **from** movie, schedule
   **where** movie.title = schedule.title AND schedule.theater = 'Cove'

3. List all theaters showing a movie by Hitchcock, and their phone numbers.

   **select** schedule.theater, schedule.phone
   **from** schedule, movie
   **where** schedule.title = movie.title AND movie.director = 'Hitchcock'

4. List all directors who are also actors in some movie.

   **select** t.director
   **from** movie t, movie s
   **where** t.director = s.actor

5. List all directors who are also actors in their own movie.

   **select** director
   **from** movie
   **where** director = actor

6. List the actors cast in at least one movie by Zeffirelli.

```
select actor
from movie
where director = 'Zeffirelli'
```

7. List the actors cast in every movie by Zeffirelli.

```
select actor
from movie
where actor NOT IN
        (select t.actor
        from movie t, movie s
        where s.director = 'Zeffirelli' and t.actor NOT IN
                (select actor
                from movie
                where title = s.title ))
```

8. List the actors cast only in movies by Zeffirelli.

```
select actor
from movie
where actor NOT IN
        (select actor
        from movie
        where director ≠ 'Zeffirelli')
```

9. Change the title "Flower of Peking" to "Flower of Beijing".

```
update movie
set title = 'Flower of Beijing'
where title = 'Flower of Peking' ;

update schedule
set title = 'Flower of Beijing'
where title = 'Flower of Peking'
```

10. Switch the movies playing at the Cove and at the Guild, without mentioning explicitly any film title in the update.

Here is one possibility:

**update** schedule
**set** theater = 'Guild'
**where** theater = 'Cove' ;

**update** schedule
**set** theater = 'Cove', phone = '459-5404'
**where** phone = '295-2000' ;

**update** schedule
**set** phone = '295-2000'
**where** theater = 'Guild'