2 Databases (tgg22)

This question involves the relational movie database used in our SQL practical.

In each part you are given the result of an SQL query together with a possibly incorrect conclusion drawn from this result.

In each case your task is to argue for or against the conclusion. You must clearly justify your reasoning. If the SQL query can be corrected, then do so.

(*a*) The following query returns 1422.

Conclusion: Our database contains information on 1422 directors.

```
select count(*)
from has_position
where position = 'director';
```

[6 marks]

(*b*) The following query returns these records:

```
PERSON_ID  NAME          POSITION  TOTAL
---------  ------------  --------  -----
nm0498278  Stan Lee      writer      15
```

Conclusion: Stan Lee did not produce any of the movies in our database.

```
select person_id, name, position, count(*) as total
from has_position as hp
join people as p on p.person_id = hp.person_id
where position <> 'actor'
  and name = 'Stan Lee'
group by person_id, name, position
```

[6 marks]

[continued ...]

1

(c) The following query attempts to return records (role, year, total) where Jennifer Lawrence plays the same `role` during the `year` a `total` number of times in different movies. The query returns these records:

```
ROLE               YEAR  TOTAL
----------------   ----  -----
Tiffany            2012    1
Mystique           2011    1
Raven              2011    1
Aurora Lane        2016    1
Katniss Everdeen   2012    2
Ree                2010    1
Rosalyn Rosenfeld  2013    1
Katniss Everdeen   2013    2
```

Conclusion: Jennifer Lawrence played Katniss Everdeen in two movies in 2012.

```
select r1.role, m1.year, count(*) as total
from plays_role as r1
join plays_role as r2 on r2.person_id = r1.person_id
join movies as m1 on m1.movie_id = r1.movie_id
join movies as m2 on m2.movie_id = r2.movie_id
join people as p on p.person_id = r1.person_id
where p.name = 'Jennifer Lawrence'
      and r1.role = r2.role
group by r1.role, m1.year;
```

[8 marks]