Datenbanken: Übungsblatt 7

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Aufgabe 1	Aufgabe 2	Aufgabe 3	Aufgabe 4	Aufgabe 5	$\sum$

Aufgabe 1

1. ```
   SELECT a.name, count(*) AS bands_gegruendet
   FROM
       ARTIST_RELATION ar
       JOIN ARTIST a
       ON ar.artist0 = a.id
   WHERE ar.founder = 'Y'
   GROUP BY a.name, ar.artist0
   HAVING count(*) >= 3
   ORDER BY ar.count DESC
   ```

name	bands_gegruendet
Asai, Kenichi	6
Hein, Peter	4
Tzavaras, Vasilis	4
Lohner, Danny	4
Kaasinen, Sari	3
Tibet, David	3
Vrenna, Chris	3
Fisher, Adam	3
Linnet, Anne	3
Gane, Tim	3
Renders, Koen	3
Pablo, Morton	3

2. ```
   SELECT a.name
   FROM ARTIST a
   WHERE
       EXISTS (
           SELECT * FROM (
               SELECT cou.name
               FROM concert c JOIN COUNTRY cou ON cou.id = c.country
               WHERE c.artist = a.id
               ORDER BY EVENTDATE ASC LIMIT 1) AS tmp
           WHERE tmp.name = 'Germany'
       )
       AND a.begin_year = 1990
       AND a.type = 'Group'
   ```

name
Subway to Sally
Iced Earth
In Flames
Ace of Base
Dog Eat Dog
H-Blockx
And One
Hypocrisy
Fiddler's Green
Immortal
Welle Erdball
Wise Guys
Sylvan

3. -

4.
```
SELECT c0.name AS concert, s0.name AS SONG, count(*)
FROM
    concert c0 JOIN SONGS s0 ON c0.setlist = s0.setlist
WHERE
    EXISTS(
        SELECT *
        FROM concert c1 JOIN SONGS s1 ON c1.setlist = s1.setlist
        WHERE
            s0.pos = s1.pos+1
            AND s0.name = s1.name
            AND c0.name = c1.name
            AND c0.eventdate = c1.eventdate
            AND s0.setlist = s1.setlist
            AND NOT s0.name = ''
    )
GROUP BY s0.name, c0.name
```

```
Successfully run. 346 rows affected.
```

Aufgabe 2

1.

$$\{\texttt{<b.Gast>} \mid \texttt{b} \in \texttt{BESUCHER}, \texttt{a} \in \texttt{ANGEBOT}, \texttt{m} \in \texttt{MAG} \wedge \texttt{b.Restaurant} = \texttt{a.Restaurant} \wedge \texttt{a.Wein} = \texttt{m.Wein} \wedge \texttt{b.Gast} = \texttt{m.Gast}\} \quad (1)$$

2.

$$\{\texttt{<b.Gast>} \mid \texttt{b} \in \texttt{BESUCHER}, \texttt{a} \in \texttt{ANGEBOT}, \texttt{m} \in \texttt{MAG} \wedge \texttt{b.Restaurant} = \texttt{a.Restaurant} \wedge \texttt{a.Wein} = \texttt{m.Wein} \wedge \texttt{b.Gast} = \texttt{m.Gast} \wedge \texttt{b} \notin \texttt{BESUCHER}(\texttt{a.Restaurant} = \texttt{b.Restaurant} \wedge \texttt{a.Weine} = \texttt{m.Weine})\} \quad (2)$$