

Übungsblatt 5

Truong, testfran, Ilya

Aufgabe 1

count version:

```
SELECT LNr
FROM (SELECT * FROM LIEFERUNG NATURAL JOIN TEIL
      WHERE Farbe = 'grün') A
GROUP BY LNr
HAVING count(distinct PNr) = (SELECT count(distinct PNr) FROM A)
```

```
SELECT LNr
FROM (SELECT * FROM LIEFERUNG NATURAL JOIN TEIL
      WHERE Farbe = 'grün') A
WHERE LNr NOT EXISTS (SELECT *
                     FROM TEIL NATURAL JOIN LIEFERUNG B
                     GROUP BY PNr
                     HAVING Farbe != 'grün' and count(distinct TNr) = (SELECT count(distinct TNr) FROM B G
```

Aufgabe 2

- a.

```
CREATE TABLE pirate(
  pId NOT NULL PRIMARY KEY,
  pName NOT NULL UNIQUE,
  pShout varchar(20) DEFAULT "Arr!",
  pFakeHand int NOT NULLT CHECK(pHandCount between 0 and 2) DEFAULT 0,
  schiff_nr int
);
```
- b.

```
ALTER TABLE pirate
ADD CONSTRAINT fakeHand CHECK(pHandCount > 0 AND pShout = 'arr');
```
- c.

```
ALTER TABLE pirate
DROP CONSTRAINT fakeHand;
```
- d.

```
CREATE ASSERTION noShoutCliche AS CHECK (
  SELECT count(*) FROM pirate
  WHERE count(SELECT * FROM pirate WHERE pShout = 'arr') / count(pShout) < 0.9
)
```

Aufgabe 3