

6-26-2017

Quiz 21

Show a tuple based check constraint in which all movies made before 1920 have a NULL value in the studioname attribute.

```
1 CREATE TABLE movies (  
2 title char(50),  
3 year int,  
4 len int,  
5 studioname char(50),  
6 CHECK (year > 1920 or studioname = null )
```

Create an assertion that all stars must be at least 2 movies.

```
1 CREATE ASSERTION X  
2 CHECK  
3 (2 >= ALL (  
4     SELECT COUNT(*)  
5     FROM starsin  
6     GROUP BY starname ) )  
7 AND (  
8     NOT EXISTS (  
9         SELECT *  
10        FROM moviestar  
11        WHERE name NOT IN (  
12            SELECT starname  
13            FROM starsin ) ) )
```

Quiz 21.2

Create a trigger to ensure that on insert, the average length of movies for all studios does not drop below 1000.

```
1 CREATE TRIGGER X  
2 AFTER INSERT ON Movies(len)  
3 REFERENCING  
4     NEW TABLE AS N  
5 FOR EACH STATEMENT  
6 WHEN 1000 > (SELECT AVG(len) FROM movies)  
7 BEGIN  
8     DELETE FROM movies  
9     WHERE (T, Y, L, FT, SN) IN N  
10 END
```

