

CSC343 Worksheet 5

June 18, 2020

1. **Exercise 7.1.1:** Our running example movie database of Section 2.2.8 has keys defined for all its relations.

```
1  Movies(title, year, length, genre, studioName, producerC#)
2  StarsIn(movieTitle, movieYear, starName)
3  MovieStar(name, address, gender, birthdate)
4  MovieExec(name, address, cert#, netWorth)
5  Studio(name, address, presC#)
6
```

Declare the following referential integrity constraints for the movie database as in Exercise 7.1.1.

- a) The producer of a movie must be someone mentioned in MovieExec. Modifications to MovieExec that violate this constraint are rejected.
- b) Repeat (a), but violations result in the producerC# in Movie being set to NULL.
- c) Repeat (a), but violations result in the deletion or update of the offending Movie tuple.
- d) A movie that appears in Stars In must also appear in Movie. Handle violations by rejecting the modification.
- e) A star appearing in Stars In must also appear in MovieStar. Handle violations by deleting violating tuples.