Nate Bender CS342 Guide05

Work through the following materials writing one sample query for each mechanism. Use this <u>modified</u> <u>version of the movies database</u> as the basis for your queries.

- 1. Basic SQL (Section 6.3) Review basic SQL as needed, then write sample queries that:
  - a. Use one or more tuple variables (Section 6.3.2).

SELECT \* FROM Movie WHERE (score, year) IN (1977,8.9);

b. Use one or more of the set operations, e.g., UNION, EXCEPT, INTERSECT (Section 6.3.4).

SELECT title FROM Movie

UNION

SELECT performerID.firstName FROM Casting where Casting.MovieId = Movie.id;

SELECT \* FROM Movie WHERE year > 1990

**EXCEPT** 

SELECT \* FROM Movie WHERE score < 7;

- 2. Advanced SQL (Sections 7.1.1–7.1.5) This will include more new material; write sample queries that:
  - c. Select based on a NULL field value (Section 7.1.1).

SELECT \* FROM Performer WHERE lastName = NULL;

d. Implement a nested sub-query, using [NOT] EXISTS, IN, ANY or ALL (Sections 7.1.2–7.1.4).

```
SELECT Title FROM (
SELECT Movie.id FROM CASTING WHERE movield = 2
)
WHERE status = 'costar';
```

e. Implement a correlated sub-query (Section 7.1.3).

```
SELECT p.lastName, p.firstName FROM Performers p
WHERE 2 <= (SELECT Count(*)
FROM Casting c
WHERE c.perfomerId = p.id);
```