Homework #1

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COMP 353/453

<u>Division of Workload</u>

- Anthony: Questions 1-3, reviewed Kristin's work for accuracy, typed up report
- Kristin: Questions 4-6, reviewed Anthony's work for accuracy, compiled questions into a text file

Q1.

SELECT S.songCode, C.trackNumber, S.songTitle
FROM song AS S, composedof AS C
WHERE C.songcode = S.songcode AND C.cdCode = (
      SELECT cdcode
      FROM topcds
      WHERE year = 2003 AND rating = 1)
ORDER BY C.trackNumber ASC;

Q2.

SELECT MG.groupCode, MG.groupName,COUNT(C.cdCode) AS numberOfTop10CDs
FROM musicalGroup AS MG, cd AS C
WHERE MG.groupCode = C.groupcode AND C.cdcode IN(
        SELECT cdcode
        FROM topcds)
GROUP BY MG.groupCode, MG.groupName
ORDER BY numberOfTop10CDs DESC;

Q3.

SELECT agg.year, MAX(agg.tracknum) AS maxNumber,MIN(agg.tracknum) AS
minNumber,ROUND(AVG(agg.tracknum),2) AS avgNumber
FROM(
    SELECT cd.year,C.cdcode, COUNT(*) AS tracknum
    FROM composedOf C, cd
    WHERE cd.cdcode = C.cdcode AND cd.year >= 2000
    GROUP BY C.cdcode,cd.year) AS agg
GROUP BY agg.year
ORDER BY agg.year ASC;
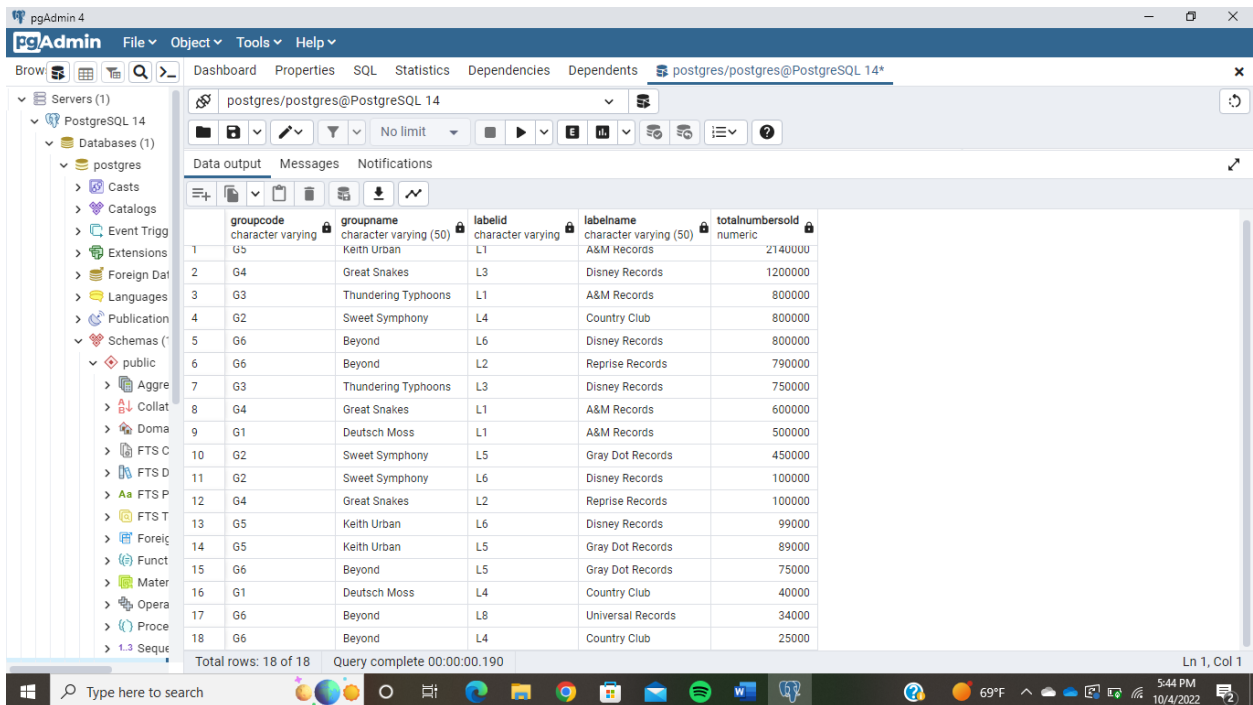
Q4.

SELECT cd.groupcode, M.groupName, cd.labelID, R.labelName, sum(cd.numbersold) AS totalNumberSold
FROM cd, musicalGroup M, recordingLabel R
WHERE M.groupcode = cd.groupCode AND R.labelID = cd.labelID
GROUP BY cd.groupcode, M.groupName, cd.LabelID, R.labelName
ORDER BY totalNumberSold desc

	groupcode	groupname	labelid	labelname	totalnumbersold
1	G5	Keith Urban	L1	A&M Records	2140000
2	G4	Great Snakes	L3	Disney Records	1200000
3	G3	Thundering Typhoons	L1	A&M Records	800000
4	G2	Sweet Symphony	L4	Country Club	800000
5	G6	Beyond	L6	Disney Records	800000
6	G6	Beyond	L2	Reprise Records	790000
7	G3	Thundering Typhoons	L3	Disney Records	750000
8	G4	Great Snakes	L1	A&M Records	600000
9	G1	Deutsch Moss	L1	A&M Records	500000
10	G2	Sweet Symphony	L5	Gray Dot Records	450000
11	G2	Sweet Symphony	L6	Disney Records	100000
12	G4	Great Snakes	L2	Reprise Records	100000
13	G5	Keith Urban	L6	Disney Records	99000
14	G5	Keith Urban	L5	Gray Dot Records	89000
15	G6	Beyond	L5	Gray Dot Records	75000
16	G1	Deutsch Moss	L4	Country Club	40000
17	G6	Beyond	L8	Universal Records	34000
18	G6	Beyond	L4	Country Club	25000

Total rows: 18 of 18   Query complete 00:00:00.190

Q5.

SELECT artistID, firstName, lastName, yearBorn
FROM artist
WHERE artistID IN(

       SELECT artist.artistID

       FROM artist, writtenby, topsongs

       WHERE writtenBy.songCode = topSongs.songCode AND

             writtenBy.artistID = artist.ArtistID AND

             topSongs.rating <= 5

) AND artistID NOT IN (

       SELECT artistID from member

)

ORDER BY lastname, firstname desc

Q6.

SELECT DISTINCT M.groupCode, M.groupName

FROM musicalgroup M, cd

WHERE M.groupcode = cd.groupcode AND M.groupcode IN(

       SELECT cd.groupcode

       FROM cd, recordingLabel R

       WHERE cd.labelid = R.labelid AND R.location = 'Detroit') AND M.groupcode NOT IN(

       SELECT cd.groupcode

       FROM cd, recordingLabel R

       WHERE cd.labelid = R.labelid AND R.location != 'Detroit')

ORDER BY M.groupname ASC;