**CS 4400 X HW 2**

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**Query 5~8 : Jae Min Baek**

**Query 1**

List  the stores (number and name) located in Florida and the sum of the total\_visit\_amt  for each store and order the result by store number.

SELECT i.store\_name, i.store\_nbr, SUM(v.total\_visit\_amt)

FROM store\_information i

JOIN store\_visits v

ON i.store\_nbr = v.store\_nbr

WHERE i.state='FL'

GROUP BY i.store\_name, i.store\_nbr

ORDER BY i.store\_nbr;

**Query 2**

List by week (i.e., week  1, 2, 3, …) for the month of January 2000, the  Florida stores  (number) and the sum of total\_visit\_amt for each store.  In this query result we also want

-          the sum for each week for all  stores  as well as the sum for each store

-          the sum for each store for all weeks

-          the sum for all weeks and all stores

Order the result by week number and store number**.**

SELECT ((EXTRACT(day FROM v.transaction\_date)-1)/7 + 1) as week, i.store\_nbr, SUM(v.total\_visit\_amt) as total\_sold

FROM store\_information i

JOIN store\_visits v

ON i.store\_nbr = v.store\_nbr

WHERE i.state='FL' AND EXTRACT(month FROM v.transaction\_date)=1 AND EXTRACT(year FROM v.transaction\_date)=2000

GROUP BY ROLLUP(i.store\_nbr, week)

ORDER BY i.store\_nbr, Week;

**Query 3**

List by week (i.e., week  1, 2, 3, …) for the month of January 2000, the  Florida  stores  (number) and the weekly sales  sum of total\_visit\_amt for each store along with the Rank of the sales for the week (where a rank of 1 is for the store with the highest sales in that week)  for the Florida stores.

Order the result by week number and store number.

SELECT ((EXTRACT(day FROM v.transaction\_date)-1)/7 + 1) as week, i.store\_nbr, SUM(v.total\_visit\_amt) as total\_sold, RANK() OVER (PARTITION BY week ORDER BY total\_sold DESC)

FROM store\_information i

JOIN store\_visits v

ON i.store\_nbr = v.store\_nbr

WHERE i.state='FL' AND EXTRACT(month FROM v.transaction\_date)=1 AND EXTRACT(year FROM v.transaction\_date)=2000

GROUP BY i.store\_nbr, week

ORDER BY i.store\_nbr, week;

**Query 4**

List the member numbers for members who have visited a particular store more than 1,000 times. Order the result by store\_nbr and membership\_nbr.

SELECT membership\_nbr

FROM store\_visits

GROUP BY membership\_nbr, store\_nbr

HAVING COUNT(\*) > 1000

ORDER BY store\_nbr, membership\_nbr;

**Query 5 (5):**List the store number and the number of visits by customers for the store  with the most visits.

SELECT top 1 Store\_Nbr, count(\*) as number\_Visit

FROM Store\_visits

GROUP BY store\_nbr

ORDER BY number\_Visit desc

**Query 6 (10)**:    Find members that have visited more than 10 different stores.   Include

SELECT membership\_nbr, COUNT(DISTINCT store\_nbr) as cnt

FROM store\_visits

GROUP BY membership\_nbr

HAVING cnt>10

ORDER BY membership\_nbr, cnt desc

**Query 7 (20)**:    Which item (item\_nb ,  upc\_desc) sold the most, sum(item\_quantity),   in each week in the month of January 2000 for Florida stores?

SELECT ((EXTRACT(day FROM s.transaction\_date)-1)/7 + 1) as week, s.item\_nbr, d.upc\_desc, SUM(s.item\_quantity) as num\_sold

FROM store\_information i

JOIN item\_scan s

ON i.store\_nbr= s.store\_nbr

JOIN item\_desc d

ON d.item\_nbr = s.item\_nbr

QUALIFY RANK() OVER (PARTITION BY week ORDER BY num\_sold DESC) = 1

WHERE i.state='FL'

GROUP BY week, s.item\_nbr, d.upc\_desc

ORDER BY week;

**Query 8 (15)**:   Which vendors (vendor number) supply more than 6% of the unique  items  that are sold at that store ( store number) in Florida?

! more than 6% was vague for us.   
We assumed something life 6.2 or 6.4%  is not more than 6% (still in 6 percentage boundary). If you wanted 6.2 and 6.4 are also more than 6%, please change 100 -> 100.0 on the second line of the statement. Thank you! (I don’t think it matters, but just in case)

SELECT v.v\_nbr as Vendor\_Number, s.nbr as Store\_Number, (v.vnd\_cnt \* 100)/s.cnt as percentage

FROM

(

SELECT d.vendor\_nbr as v\_nbr, s.store\_nbr as nbr, COUNT(DISTINCT s.item\_nbr) as vnd\_cnt

FROM item\_desc d

JOIN item\_scan s

ON d.item\_nbr = s.item\_nbr

GROUP BY d.vendor\_nbr, s.store\_nbr

) v

JOIN

(

SELECT i.store\_nbr as nbr, COUNT(DISTINCT s.item\_nbr) as cnt

FROM store\_information i

JOIN item\_scan s

ON s.store\_nbr= i.store\_nbr

WHERE i.state='FL'

GROUP BY i.store\_nbr

) s

ON s.nbr = v.nbr

WHERE percentage > 6