1)

SELECT RentalNo, RAGREEMENT.StartDate, RAGREEMENT.ReturnDate,

RAGREEMENT.MileageBefore, RAGREEMENT.MileageAfter, LicenseNo,

VEHICLE.outNo, VEHICLE.Make, VEHICLE.Model, VEHICLE.Year,

FAULTREPORT.DateChecked

FROM (RAGREEMENT NATURAL JOIN VEHICLE)

LEFT OUTER JOIN FAULTREPORT

USING (LicenseNo, RentalNo);

2)

SELECT \* FROM

(SELECT outNo "Outlet", COUNT(DISTINCT VEHICLE.LicenseNo)" Number of

Vehicles",COUNT(DISTINCT EmpNo)"Number of Employees"

FROM (VEHICLE NATURAL JOIN EMPLOYEE)

GROUP BY outNo)

JOIN

(SELECT outNo "Outlet", COUNT(DISTINCT RentalNo) "Rentals-12 Months",

AVG(MileageAfter - MileageBefore) "Avg Distance",

(COUNT(DISTINCT RentalNo)/COUNT(DISTINCT EmpNo)) "Rentals Per

Employee"

FROM (OUTLET NATURAL JOIN VEHICLE) NATURAL JOIN

(RAGREEMENT) JOIN

(EMPLOYEE) using (outno)

WHERE StartDate BETWEEN ADD\_MONTHS(SYSDATE,-12) AND SYSDATE

GROUP BY outNo)

USING("Outlet")

UNION

SELECT \* FROM

(SELECT NULL "Outlet", COUNT(DISTINCT VEHICLE.LicenseNo) "Number of

Vehicles", COUNT(DISTINCT Employee.EmpNo) "Number of Employees"

FROM (VEHICLE NATURAL JOIN EMPLOYEE))

CROSS JOIN

(SELECT SUM(COUNT(DISTINCT RentalNo)) "Rentals-12 Months",

SUM(AVG(MileageAfter-MileageBefore)) "Avg Distance",

SUM(COUNT(DISTINCT RentalNo)/COUNT(DISTINCT EmpNo)) "Rentals

per Employee"

FROM (OUTLET NATURAL JOIN VEHICLE) NATURAL JOIN (RAGREEMENT)

JOIN (EMPLOYEE) using (outno)

WHERE StartDate BETWEEN ADD\_MONTHS(SYSDATE,-12) AND SYSDATE

GROUP BY outno);

3)

SELECT DECODE(OutNo, NULL, 'Total', TO\_CHAR(OutNo,'90')) "Outlet",

TO\_CHAR(NVL(SUM(DECODE(TRIM(TO\_CHAR(ReturnDate, 'Month')),'January',(returnDate - startDate) \* DailyRate)),0),'$9,999,9990.99') "Jan",

TO\_CHAR(NVL(SUM(DECODE(TRIM(TO\_CHAR(ReturnDate, 'Month')),'February',(returnDate - startDate) \* DailyRate)),0),'$9,999,9990.99') "Feb",

TO\_CHAR(NVL(SUM(DECODE(TRIM(TO\_CHAR(ReturnDate, 'Month')),'March',(returnDate - startDate) \* DailyRate)),0),'$9,999,9990.99') "Mar",

TO\_CHAR(NVL(SUM(DECODE(TRIM(TO\_CHAR(ReturnDate, 'Month')),'April',(returnDate - startDate) \* DailyRate)),0),'$9,999,9990.99') "Apr",

TO\_CHAR(NVL(SUM(DECODE(TRIM(TO\_CHAR(ReturnDate, 'Month')),'May',(returnDate - startDate) \* DailyRate)),0),'$9,999,9990.99') "May",

TO\_CHAR(NVL(SUM(DECODE(TRIM(TO\_CHAR(ReturnDate, 'Month')),'June',(returnDate - startDate) \* DailyRate)),0),'$9,999,9990.99') "Jun",

TO\_CHAR(NVL(SUM(DECODE(TRIM(TO\_CHAR(ReturnDate, 'Month')),'July',(returnDate - startDate) \* DailyRate)),0),'$9,999,9990.99') "Jul",

TO\_CHAR(NVL(SUM(DECODE(TRIM(TO\_CHAR(ReturnDate, 'Month')),'August',(returnDate - startDate) \* DailyRate)),0),'$9,999,9990.99') "Aug",

TO\_CHAR(NVL(SUM(DECODE(TRIM(TO\_CHAR(ReturnDate, 'Month')),'September',(returnDate - startDate) \* DailyRate)),0),'$9,999,9990.99') "Sep",

TO\_CHAR(NVL(SUM(DECODE(TRIM(TO\_CHAR(ReturnDate, 'Month')),'October',(returnDate - startDate) \* DailyRate)),0),'$9,999,9990.99') "Oct",

TO\_CHAR(NVL(SUM(DECODE(TRIM(TO\_CHAR(ReturnDate, 'Month')),'November',(returnDate - startDate) \* DailyRate)),0),'$9,999,9990.99') "Nov",

TO\_CHAR(NVL(SUM(DECODE(TRIM(TO\_CHAR(ReturnDate, 'Month')),'December',(returnDate - startDate) \* DailyRate)),0),'$9,999,9990.99') "Dec",

TO\_CHAR(NVL(SUM((returnDate - startDate) \* DailyRate),0),'$9,999,9990.99') "Total Revenue",

NVL(COUNT(distinct RentalNo),0) "Total Rentals",

TO\_CHAR(NVL(SUM((returnDate - startDate) \* DailyRate)/COUNT(distinct rentalno),0),'$9,999,9990.99') "Revenue per rental"

FROM (OUTLET NATURAL JOIN VEHICLE) JOIN RAGREEMENT USING(LicenseNo)

GROUP BY GROUPING SETS (OutNo,())

ORDER BY OutNo;

4)

SELECT DECODE(OutNo, NULL, 'Total', TO\_CHAR(OutNo,'90')) "Outlet",

CAST(SUM(DECODE(TRIM(TO\_CHAR(StartDate, 'Day')),'Sunday',1)) || '/' || SUM(DECODE(TRIM(TO\_CHAR(DateChecked, 'Day')),'Sunday',1)) as char(6)) "Sun",

CAST(SUM(DECODE(TRIM(TO\_CHAR(StartDate, 'Day')),'Monday',1)) || '/' ||SUM(DECODE(TRIM(TO\_CHAR(DateChecked, 'Day')),'Monday',1)) as char(6)) "Mon",

CAST(SUM(DECODE(TRIM(TO\_CHAR(StartDate, 'Day')),'Tuesday',1)) || '/' ||SUM(DECODE(TRIM(TO\_CHAR(DateChecked, 'Day')),'Tuesday',1)) as char(6)) "Tue",

CAST(SUM(DECODE(TRIM(TO\_CHAR(StartDate, 'Day')),'Wednesday',1)) || '/' ||SUM(DECODE(TRIM(TO\_CHAR(DateChecked, 'Day')),'Wednesday',1)) as char(6)) "Wed",

CAST(SUM(DECODE(TRIM(TO\_CHAR(StartDate, 'Day')),'Thursday',1)) || '/' ||SUM(DECODE(TRIM(TO\_CHAR(DateChecked, 'Day')),'Thursday',1)) as char(6))"Thu",

CAST(SUM(DECODE(TRIM(TO\_CHAR(StartDate, 'Day')),'Friday',1)) || '/' ||SUM(DECODE(TRIM(TO\_CHAR(DateChecked, 'Day')),'Friday',1)) as char(6)) "Fri",

CAST(SUM(DECODE(TRIM(TO\_CHAR(StartDate, 'Day')),'Saturday',1)) || '/' ||SUM(DECODE(TRIM(TO\_CHAR(DateChecked, 'Day')),'Saturday',1)) as char(6)) "Sat",

COUNT(OutNo) "Total"

FROM ((OUTLET NATURAL JOIN VEHICLE) JOIN

RAGREEMENT USING(LicenseNo)) JOIN

FAULTREPORT USING(LicenseNo,RentalNo)

WHERE StartDate BETWEEN ADD\_MONTHS(SYSDATE,-6) AND SYSDATE

GROUP BY GROUPING SETS (OutNo,())

ORDER BY OutNo;

5)

SELECT e.EmpNo || '-' || INITCAP(e.Fname) || ' ' || INITCAP(e.Lname) as "MANAGER",

o.outNo as "OUTLET",

COUNT(RentalNo) as "RENTALS",

TO\_CHAR(NVL(SUM((ReturnDate - StartDate)\*DailyRate)/COUNT(RentalNo),0),'$9,999,990.90') as "REVENUE per RENTAL",

NVL(COUNT(ReportNum)/COUNT(RentalNo),0) as "FAULTREPORTS per RENTAL"

FROM employee e JOIN outlet o ON (e.EmpNo = o.ManagerNo)

JOIN vehicle v ON (o.outNo = v.outNo)

JOIN ragreement r USING (LicenseNo)

JOIN faultreport f USING (RentalNo)

GROUP BY e.EmpNo, e.Fname, e.Lname, o.outNo

UNION

SELECT 'GRAND TOTALS per MANAGER', NULL, NULL, NULL, NULL

FROM dual

UNION ALL

SELECT e.EmpNo || '-' || INITCAP(e.Fname) || ' ' || INITCAP(e.Lname) as "MANAGER",

COUNT(DISTINCT(o.outNo)) as "OUTLETS",

COUNT(RentalNo) as "RENTALS",

TO\_CHAR(NVL(SUM((ReturnDate - StartDate)\*DailyRate)/COUNT(RentalNo),0),'$9,999,990.90') as "REVENUE per RENTAL",

NVL(COUNT(ReportNum)/COUNT(RentalNo),0) as "FAULTREPORTS per RENTAL"

FROM employee e JOIN outlet o ON (e.EmpNo = o.ManagerNo)

JOIN vehicle v ON (o.outNo = v.outNo)

JOIN ragreement r USING (LicenseNo)

JOIN faultreport f USING (RentalNo)

GROUP BY e.EmpNo, e.Fname, e.Lname;

6)

SELECT outNo,

DECODE(rank,1,'MAXIMUM',NULL) "GENERATED", revenue

FROM

(SELECT outNo,

TO\_CHAR(NVL(SUM((ReturnDate - StartDate)\*DailyRate),0),

'$9,999,990.90') as revenue,

RANK() OVER (ORDER BY SUM((ReturnDate - StartDate)\*DailyRate) DESC) as rank

FROM outlet o JOIN vehicle v USING (outNo)

JOIN ragreement r USING (LicenseNo)

WHERE ReturnDate BETWEEN '01-OCT-2015' AND '31-MAR-2016'

AND StartDate BETWEEN '01-OCT-2015' AND '31-MAR-2016'

GROUP BY outNo)

WHERE rank = 1

UNION

SELECT outNo,

DECODE(rank,1,'MINIMUM',NULL) "GENERATED",revenue

FROM (SELECT outNo,

TO\_CHAR(NVL(SUM((ReturnDate - StartDate)\*DailyRate),0),

'$9,999,990.90') as revenue,

RANK() OVER (ORDER BY SUM((ReturnDate - StartDate)\*DailyRate)) as

rank

FROM outlet o JOIN vehicle v USING (outNo)

JOIN ragreement r USING (LicenseNo)

WHERE ReturnDate BETWEEN '01-OCT-2015' AND '31-MAR-2016'

AND StartDate BETWEEN '01-OCT-2015' AND '31-MAR-2016'

GROUP BY outNo)

WHERE rank = 1;

7)

SELECT make, model,

COUNT(DISTINCT LicenseNo) as "#CARS",

AVG(EXTRACT(YEAR FROM SYSDATE) - year) as "AVERAGE AGE OF CARS",

COUNT(DISTINCT RentalNo) as "#RENTALS THIS YEAR",

COUNT(DISTINCT ReportNum) as "#FAULTREPORTS THIS YEAR"

FROM vehicle v

LEFT OUTER JOIN (SELECT ReportNum, LicenseNo

FROM faultreport f

WHERE EXTRACT(YEAR FROM DateChecked) = EXTRACT(YEAR

FROM SYSDATE))

USING (LicenseNo)

LEFT OUTER JOIN (SELECT RentalNo, LicenseNo

FROM ragreement r

WHERE EXTRACT(YEAR FROM StartDate) = EXTRACT(YEAR

FROM SYSDATE) AND

EXTRACT(YEAR FROM ReturnDate) = EXTRACT(YEAR

FROM SYSDATE))

USING (LicenseNo)

GROUP BY ROLLUP (make, model);

8)

SELECT TRUNC((EXTRACT(MONTH FROM StartDate)-1)/3)+1 as quarter,

make,

COUNT(RentalNo) as "#RENTALS",

COUNT(ReportNum) as "#FAULTREPORTS",

RANK() OVER (ORDER BY COUNT(ReportNum) DESC) as rank

FROM vehicle v JOIN ragreement r USING (LicenseNo)

LEFT OUTER JOIN faultreport f USING (RentalNo)

WHERE EXTRACT(YEAR FROM StartDate) = EXTRACT(YEAR FROM SYSDATE) - 1

AND EXTRACT(YEAR FROM ReturnDate) = EXTRACT(YEAR FROM SYSDATE) - 1

GROUP BY TRUNC((EXTRACT(MONTH FROM StartDate)-1)/3)+1, make

ORDER BY quarter, rank;

9)

SELECT outNo,

NVL(InstateClients,0) as "#INSTATE CLIENTS",

NVL(InstateRentals,0) as "#INSTATE RENTALS",

NVL(round((InstateClients\*100/AllClients),2),0)||'%' as "INSTATE

CUSTOMERS",

NVL(round((InstateRentals\*100/AllRentals),2),0)||'%' as "INSTATE

RENTALS"

FROM

(SELECT outNo,

COUNT(clientNo) as AllClients,

COUNT(RentalNo) as AllRentals

FROM outlet o JOIN vehicle v USING (outNo)

JOIN ragreement r USING (LicenseNo)

JOIN client c USING (clientNo)

GROUP BY outNo) ac

LEFT OUTER JOIN

(SELECT outNo,

COUNT(clientNo) as InstateClients,

COUNT(RentalNo) as InstateRentals

FROM outlet o JOIN vehicle v USING (outNo)

JOIN ragreement r USING (LicenseNo)

JOIN client c USING (clientNo)

WHERE c.state = o.state

GROUP BY outNo) ic USING(outNo);

10)

SELECT LEVEL,

LPAD(' ', 3\*(LEVEL-1)) || EmpNo || '-' || Fname || ' ' || Lname

"Employee", Position as "Title", outNo, Street,

(SELECT COUNT(ReportNum)

FROM employee JOIN faultreport USING(EmpNo)

WHERE SYSDATE - DateChecked <= 90) as "#FAULTREPORTS IN 90 DAYS"

FROM employee JOIN outlet USING(outNo)

START WITH EmpNo = (SELECT EmpNo

FROM employee

WHERE SupervisorNo IS NULL)

CONNECT BY PRIOR EmpNo = SupervisorNo;