*FDM Rental Company*

DBM FINAL PROJECT

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GROUP #6

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~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ PART II.A ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

------------------------------ SCRIPT #1 -----------------------------

DROP TABLE Employee CASCADE CONSTRAINTS;

DROP TABLE Client CASCADE CONSTRAINTS;

DROP TABLE Outlet CASCADE CONSTRAINTS;

DROP TABLE Vehicle CASCADE CONSTRAINTS;

DROP TABLE Ragreement CASCADE CONSTRAINTS;

DROP TABLE FaultReport CASCADE CONSTRAINTS;

CREATE TABLE Employee

(EmpNo VARCHAR2(4),

Fname VARCHAR2(20),

Lname VARCHAR2(20),

Position VARCHAR2(25),

Phone VARCHAR2(12),

Email VARCHAR2(25),

DOB DATE,

Gender CHAR(1),

Salary NUMBER(8,2),

HireDate DATE DEFAULT SYSDATE,

OutNo VARCHAR2(3),

SupervisorNo VARCHAR2(4),

CONSTRAINT Employee\_EmpNo\_PK PRIMARY KEY (EmpNo),

CONSTRAINT Employee\_SupervisorNo\_FK FOREIGN KEY (SupervisorNo) REFERENCES Employee (EmpNo));

CREATE TABLE Outlet

(outNo VARCHAR2(3),

Street VARCHAR2(20),

City VARCHAR2(12),

State VARCHAR2(2),

ZipCode VARCHAR2(5),

Phone VARCHAR2(12),

ManagerNo VARCHAR2(4),

CONSTRAINT Outlet\_outNo\_PK PRIMARY KEY (outNo),

CONSTRAINT Outlet\_ManagerNo\_FK FOREIGN KEY (ManagerNo) REFERENCES Employee (EmpNo));

CREATE TABLE Vehicle

(LicenseNo VARCHAR2(6),

Make VARCHAR2(30),

Model VARCHAR2(30),

Color VARCHAR2(10),

Year NUMBER(4),

NoDoors CHAR(1),

Capacity NUMBER(1),

DailyRate NUMBER(6,2),

InspectionDate DATE,

outNo VARCHAR2(3),

CONSTRAINT Vehicle\_LicenseNo\_PK PRIMARY KEY (LicenseNo),

CONSTRAINT Vehicle\_outNo\_FK FOREIGN KEY (outNo) REFERENCES Outlet (outNo),

CONSTRAINT Vehicle\_Year\_ck CHECK (year >= 2018 - 10),

CONSTRAINT Vehicle\_Casing\_ck CHECK (make = UPPER(make) AND model = UPPER(model) AND color= UPPER(color)));

CREATE TABLE Client

(clientNo VARCHAR2(4),

ClientName VARCHAR2(40),

Street VARCHAR2(30),

City VARCHAR2(30),

State CHAR(2),

ZipCode VARCHAR2(5),

WebAddress VARCHAR2(100),

Contact\_FName VARCHAR2(20),

Contact\_LName VARCHAR2(20),

Phone VARCHAR2(12),

Email VARCHAR2(25),

CONSTRAINT Client\_RentalNo\_PK PRIMARY KEY (clientNo));

CREATE TABLE Ragreement

(RentalNo VARCHAR2(4),

StartDate DATE,

ReturnDate DATE,

MileageBefore NUMBER(6),

MileageAfter NUMBER(6),

InsuranceType VARCHAR2(25),

ClientNo VARCHAR2(4),

LicenseNo VARCHAR2(6),

CONSTRAINT Ragreement\_RentalNo\_PK PRIMARY KEY (RentalNo),

CONSTRAINT Ragreement\_ClientNo\_FK FOREIGN KEY (ClientNo) REFERENCES Client (clientNo),

CONSTRAINT Ragreement\_LicenseNo\_FK FOREIGN KEY (LicenseNo) REFERENCES Vehicle (LicenseNo),

CONSTRAINT Ragreement\_MileLimit\_ck CHECK (MileageAfter - MileageBefore <= 100000),

CONSTRAINT Ragreement\_RentLimit\_ck CHECK (ReturnDate - StartDate < 365));

CREATE TABLE FaultReport

(ReportNum VARCHAR2(4),

DateChecked DATE,

Comments VARCHAR2(300),

EmpNo VARCHAR2(4),

LicenseNo VARCHAR2(6),

RentalNo VARCHAR2(4),

CONSTRAINT FaultReport\_ReportNum\_PK PRIMARY KEY (ReportNum),

CONSTRAINT FaultReport\_EmpNo\_FK FOREIGN KEY (EmpNo) REFERENCES Employee (EmpNo),

CONSTRAINT FaultReport\_LicenseNo\_FK FOREIGN KEY (LicenseNo) REFERENCES Vehicle (LicenseNo),

CONSTRAINT FaultReport\_RentalNo\_FK FOREIGN KEY (RentalNo) REFERENCES Ragreement (RentalNo));

ALTER TABLE Employee

ADD CONSTRAINT Employee\_OutNo\_FK

FOREIGN KEY (OutNo) REFERENCES Outlet (outNo);

------------------------------ SCRIPT #2 -----------------------------

INSERT into Client VALUES ('C1', 'James Franco', '1 Maple St', 'Pittsburgh', 'PA', '15213', 'www.jamesfranco.com', 'James', 'Franco', '412-111-1111', 'jfranco@gmail.com');

INSERT into Client VALUES ('C2', 'Sarah Franco', '1 Maple St', 'Pittsburgh', 'PA', '15213', NULL, 'Sarah', 'Franco', '412-111-1112', 'sfranco@gmail.com');

INSERT into Client VALUES ('C3', 'Matt Hammond', '9 Porter Road', 'Freehold', 'NJ', '07728', 'www.mhammond.com', 'Matt', 'Hammond', '732-111-1113', 'mhammond@yahoo.com');

INSERT into Client VALUES ('C4', 'Amazon', '26 Tennent Road', 'Manalapan', 'NJ', '07726', 'www.amazon.com', 'Jeff', 'Bezos', '732-111-1114', 'jbezos@gmail.com');

INSERT into Client VALUES ('C5', 'John Luther', '5203 Beeler St', 'Pittsburgh', 'PA', '15217', 'www.jluther.com', 'John', 'Luther', '412-111-1115', 'jluther@gmail.com');

INSERT into Client VALUES ('C6', 'Jack Bauer', '4400 Centre Ave', 'Pittsburgh', 'PA', '15213', NULL, 'Jack', 'Bauer', '412-111-1116', 'jbauer@gmail.com');

INSERT into Client VALUES ('C7', 'Facebook', '4400 Forbes Ave', 'Pittsburgh', 'PA', '15213', 'www.facebook.com', 'Mark', 'Zuckerberg', '412-111-1117', 'ffowler@gmail.com');

INSERT into Client VALUES ('C8', 'Blake Griffin', '4400 Fifth Ave', 'New York', 'NY', '08830', 'www.blakegriffindor.com', 'Blake', 'Griffin', '412-111-1118', 'bgriffin@gmail.com');

INSERT into Client VALUES ('C9', 'Stephen Curry', '4400 Second Ave', 'New York', 'NY', '08831', 'www.buckets.com', 'Stephen', 'Curry', '412-111-1119', 'scurry@gmail.com');

INSERT into Client VALUES ('C10', 'Lebron James', '4400 Third Ave', 'Patterson', 'NJ', '07736', 'www.bronbron.com', 'Lebron', 'James', '412-111-1100', 'ljames@gmail.com');

INSERT into Client VALUES ('C11', 'James Harden', '4400 Fourth Ave', 'Patterson', 'NJ', '07736', 'www.underrated.com', 'James', 'Harden', '412-441-1116', 'jharden@gmail.com');

INSERT into Client VALUES ('C12', 'Saquon Barkley', '4400 Eighth Ave', 'Honolulu', 'HI', '10110', 'www.rookieoftheyear.com/2019', 'Saquon', 'Barkley', '402-111-1116', 'sbarkley@gmail.com');

INSERT into Outlet VALUES ('O1', '601 Clyde Street', 'Pittsburgh', 'PA', '15213','732-901-0001', NULL);

INSERT into Outlet VALUES ('O2', '5331 Beeler Street', 'Pittsburgh', 'PA', '15217', '732-901-0002', NULL);

INSERT into Outlet VALUES ('O3', '8 Beechwood Dr', 'Manalapan', 'NJ', '07726', '732-901-0003', NULL);

INSERT into Outlet VALUES ('O4', '1 Woodward Blvd', 'Freehold', 'NJ', '07728', '732-901-0004', NULL);

INSERT into Employee VALUES ('E6', 'John', 'Doe', 'Administrative Assistants', '810-456-1112', 'jdoe@fdm.com', '24-DEC-1988', 'M', 40000, '15-NOV-2016', 'O4', NULL);

INSERT into Employee VALUES ('E2', 'Richard', 'Guerra', 'Sales Rep', '732-855-7698', 'rguerra@fdm.com', '15-JAN-1980', 'M', 100000, '01-APRIL-2002', 'O1', 'E6');

INSERT into Employee VALUES ('E1', 'Vijay', 'Singh', 'Sales Rep', '732-585-6789', 'vsingh@fdm.com', '01-MAY-1994', 'M', 60000, '01-JUN-2012', 'O1', 'E2');

INSERT into Employee VALUES ('E3', 'Sandra', 'Miller', 'Mechanic', '856-787-6777', 'smiller@fdm.com', '18-MAR-1996', 'F', 60000, '15-APRIL-2014', 'O2', 'E2');

INSERT into Employee VALUES ('E4', 'Anna', 'Tavernier', 'Mechanic', '732-378-1002', 'atavernier@fdm.com', '25-FEB-1990', 'F', 75000, '10-MAR-2008', 'O3', 'E6' );

INSERT into Employee VALUES ('E5', 'Zach', 'Wayan', 'Mechanic', '878-158-1102', 'zwayan@fdm.com', '15-JUL-1995', 'M', 75000, '01-APR-2011', 'O4', 'E6');

INSERT into Employee VALUES ('E7', 'Nick', 'Jones', 'Sales Rep', '412-888-5445', 'njones@fdm.com', '15-JAN-1990', 'M', 100000, '01-JUN-07', 'O3', 'E6');

INSERT into Employee VALUES ('E8', 'Doug', 'Johnson', 'Sales Rep', '412-888-5422', 'djohnson@fdm.com', '2-JAN-1980', 'M', 50000, '01-JUN-10', 'O1', 'E1');

INSERT into Employee VALUES ('E9', 'Joe', 'Jonas', 'Mechanic', '412-888-5492', 'jjonas@fdm.com', '2-JAN-1991', 'M', 60000, '01-JUN-11', 'O2', 'E3');

INSERT into Employee VALUES ('E10', 'Claire', 'Smith', 'Administrative Assistants', '412-868-5492', 'csmith@fdm.com', '02-JAN-1999', 'F', 75000, '01-JUN-13', 'O3', 'E7');

INSERT into Employee VALUES ('E11', 'Sarah', 'Parker', 'Mechanic', '412-878-5492', 'sparker@fdm.com', '2-JAN-1991', 'M', 90000, '05-JUN-13', 'O1', 'E2');

INSERT into Employee VALUES ('E12', 'Travis', 'Scott', 'Mechanic', '412-888-5692', 'tscott@fdm.com', '2-JAN-1981', 'M', 80000, '01-JUN-12', 'O4', 'E7');

INSERT into Vehicle VALUES ('H4W332', 'JEEP', 'GRAND CHEROKEE', 'WHITE', 2018, 'F', 5, 44.99, '01-MAY-2018', 'O1');

INSERT into Vehicle VALUES ('DO4642', 'JEEP', 'CHEROKEE', 'GREY', 2010, 'F', 5, 37.99, '01-MAY-2018', 'O3');

INSERT into Vehicle VALUES ('Z90RI3', 'JEEP', 'WRANGLER', 'BLACK', 2015, 'T', 5, 57.99, '01-MAY-2018', 'O4');

INSERT into Vehicle VALUES ('J2O5NW', 'JEEP', 'PATRIOT', 'BLACK', 2013, 'F', 5, 34.99, '01-MAY-2018', 'O2');

INSERT into Vehicle VALUES ('J402J3', 'JEEP', 'COMPASS', 'WHITE', 2018, 'F', 5, 32.99, '01-MAY-2018', 'O1');

INSERT into Vehicle VALUES ('JF03G2', 'TOYOTA', 'PRIUS', 'BLUE', 2010, 'F', 5, 21.99, '01-JUN-2017', 'O2');

INSERT into Vehicle VALUES ('CIG553', 'TOYOTA', 'CAMRY', 'SILVER', 2011, 'F', 5, 24.99, '01-JUN-2016', 'O3');

INSERT into Vehicle VALUES ('M42DKF', 'TOYOTA', 'COROLLA', 'RED', 2010, 'F', 5, 26.00, '01-JUN-2016', 'O4');

INSERT into Vehicle VALUES ('U6I493', 'TOYOTA', '4RUNNER', 'GREEN', 2017, 'F', 5, 38.00, '01-JUN-2015', 'O3');

INSERT into Vehicle VALUES ('IW359G', 'TOYOTA', 'SEQUOIA', 'BRONZE', 2015, 'F', 8, 52.99, '01-DEC-2017', 'O4');

INSERT into Vehicle VALUES ('EKS456', 'CHEVROLET', 'MALIBU', 'BRONZE', 2010, 'F', 5, 27.99, '01-OCT-2018', 'O2');

INSERT into Vehicle VALUES ('IY9EE3', 'CHEVROLET', 'EQUINOX', 'BLACK', 2012, 'F', 5, 32.00, '01-OCT-2016', 'O1');

INSERT into Vehicle VALUES ('FGH132', 'CHEVROLET', 'SUBURBAN', 'BLACK', 2012, 'F', 8, 54.99, '01-OCT-2016', 'O3');

INSERT into Vehicle VALUES ('PW422H', 'CHEVROLET', 'TRAVERSE', 'BLACK', 2017, 'F', 5, 34.99, '01-OCT-2015', 'O3');

INSERT into Vehicle VALUES ('K43TI0', 'CHEVROLET', 'CAMARO', 'YELLOW', 2010, 'F', 4, 67.00, '01-OCT-2015', 'O4');

INSERT into Vehicle VALUES ('IR6GJH', 'DODGE', 'CHALLENGER', 'RED', 2011, 'F', 5, 53.00, '01-NOV-2017', 'O1');

INSERT into Vehicle VALUES ('HM4Y59', 'DODGE', 'CHARGER', 'DARK GREY', 2012, 'F', 5, 48.00, '01-NOV-2018', 'O2');

INSERT into Vehicle VALUES ('MB9L53', 'DODGE', 'CARAVAN', 'WHITE', 2013, 'F', 7, 37.99, '01-NOV-2018', 'O3');

INSERT into Vehicle VALUES ('B56MK5', 'DODGE', 'DURANGO', 'BLUE', 2014, 'F', 7, 32.00, '01-NOV-2017', 'O1');

INSERT into Vehicle VALUES ('PO4UI3', 'DODGE', 'DART', 'SILVER', 2015, 'F', 5, 26.00, '01-NOV-2018', 'O4');

INSERT into RAGREEMENT VALUES ('R1', TO\_DATE('01-AUG-2017 1:24 P.M.', 'dd-MON-yyyy hh:mi P.M.'), TO\_DATE('05-AUG-2017 3:16 P.M.', 'dd-MON-yyyy hh:mi P.M.'), 300, 700, 'Aflac', 'C1', 'EKS456');

INSERT into RAGREEMENT VALUES ('R2', TO\_DATE('10-JUN-2017 2:34 P.M.', 'dd-MON-yyyy hh:mi P.M.'), TO\_DATE('15-JUN-2017 2:42 P.M.', 'dd-MON-yyyy hh:mi P.M.'), 15000, 15500, 'Geico', 'C3', 'M42DKF');

INSERT into RAGREEMENT VALUES ('R3', TO\_DATE('18-JULY-2017 10:56 P.M.', 'dd-MON-yyyy hh:mi P.M.'), TO\_DATE('25-JULY-2017 9:55 P.M.', 'dd-MON-yyyy hh:mi P.M.'), 45000, 45750, 'Allstate', 'C4', 'M42DKF');

INSERT into RAGREEMENT VALUES ('R4', TO\_DATE('22-SEP-2017 3:32 P.M.', 'dd-MON-yyyy hh:mi P.M.'), TO\_DATE('24-SEP-2017 3:46 P.M.', 'dd-MON-yyyy hh:mi P.M.'), 60000, 60250, 'Allstate', 'C4', 'FGH132');

INSERT into RAGREEMENT VALUES ('R5', TO\_DATE('09-OCT-2017 7:36 P.M.', 'dd-MON-yyyy hh:mi P.M.'), TO\_DATE('10-OCT-2017 8:46 P.M.', 'dd-MON-yyyy hh:mi P.M.'), 210000, 210100, 'Geico', 'C3', 'M42DKF');

INSERT into RAGREEMENT VALUES ('R6', TO\_DATE('09-JAN-2018 4:45 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('10-JAN-2018 5:45 P.M.','dd-MON-yyyy hh:mi P.M.'), 10000, 10100, 'Geico', 'C2', 'B56MK5');

INSERT into RAGREEMENT VALUES ('R7', TO\_DATE('09-FEB-2017 6:30 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('19-FEB-2017 7:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 10100, 11000, 'Geico', 'C2', 'B56MK5');

INSERT into RAGREEMENT VALUES ('R8', TO\_DATE('09-MAR-2017 8:30 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('19-MAR-2017 9:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 12000, 13000, 'Aflac', 'C1', 'IR6GJH');

INSERT into RAGREEMENT VALUES ('R9', TO\_DATE('09-APR-2017 10:45 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('19-APR-2017 11:45 P.M.','dd-MON-yyyy hh:mi P.M.'), 13100, 14000, 'Aflac', 'C6', 'IR6GJH');

INSERT into RAGREEMENT VALUES ('R10', TO\_DATE('09-MAY-2017 1:15 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('19-MAY-2017 2:15 P.M.','dd-MON-yyyy hh:mi P.M.'), 14100, 15000, 'Aflac', 'C8', 'IR6GJH');

INSERT into RAGREEMENT VALUES ('R11', TO\_DATE('09-NOV-2018 3:15 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('18-NOV-2018 4:15 P.M.','dd-MON-yyyy hh:mi P.M.'), 100, 1000, 'Allstate', 'C5', 'HM4Y59');

INSERT into RAGREEMENT VALUES ('R12', TO\_DATE('20-NOV-2018 5:30 P.M.', 'dd-MON-yyyy hh:mi P.M.'), TO\_DATE('29-NOV-2018 6:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 1100, 2000, 'Allstate', 'C10', 'HM4Y59');

INSERT into RAGREEMENT VALUES ('R13', TO\_DATE('1-DEC-2018 1:20 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('2-DEC-2018 2:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 2100, 2300, 'Allstate', 'C12', 'HM4Y59');

INSERT into RAGREEMENT VALUES ('R14', TO\_DATE('3-NOV-2017 1:20 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('12-NOV-2017 2:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 2100, 2900, 'Allstate', 'C4', 'JF03G2');

INSERT into RAGREEMENT VALUES ('R15', TO\_DATE('13-DEC-2017 1:20 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('27-DEC-2017 2:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 3000, 6000, 'Allstate', 'C7', 'JF03G2');

INSERT into RAGREEMENT VALUES ('R16', TO\_DATE('09-OCT-2018 3:15 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('19-OCT-2018 4:15 P.M.','dd-MON-yyyy hh:mi P.M.'), 1000, 2000, 'Allstate', 'C1', 'PW422H');

INSERT into RAGREEMENT VALUES ('R17', TO\_DATE('20-SEP-2018 5:30 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('29-SEP-2018 6:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 1100, 2000, 'Geico', 'C11', 'PW422H');

INSERT into RAGREEMENT VALUES ('R18', TO\_DATE('1-DEC-2018 1:20 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('2-DEC-2018 2:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 2100, 2300, 'Statefarm', 'C2', 'PW422H');

INSERT into RAGREEMENT VALUES ('R19', TO\_DATE('3-DEC-2017 1:20 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('12-DEC-2017 2:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 21000, 22000, 'Allstate', 'C10', 'DO4642');

INSERT into RAGREEMENT VALUES ('R20', TO\_DATE('13-DEC-2017 1:20 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('27-DEC-2017 2:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 22300, 22600, 'Aflac', 'C3', 'DO4642');

INSERT into RAGREEMENT VALUES ('R21', TO\_DATE('09-AUG-2018 3:15 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('19-AUG-2018 4:15 P.M.','dd-MON-yyyy hh:mi P.M.'), 10000, 12000, 'Allstate', 'C1', 'IW359G');

INSERT into RAGREEMENT VALUES ('R22', TO\_DATE('20-JUL-2018 5:30 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('29-JUL-2018 6:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 12100, 15000, 'Geico', 'C9', 'IW359G');

INSERT into RAGREEMENT VALUES ('R23', TO\_DATE('1-NOV-2018 1:20 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('2-NOV-2018 2:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 2100, 2300, 'Statefarm', 'C2', 'IR6GJH');

INSERT into RAGREEMENT VALUES ('R24', TO\_DATE('3-APR-2017 1:20 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('12-APR-2017 2:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 15100, 16000, 'Allstate', 'C8', 'IW359G');

INSERT into RAGREEMENT VALUES ('R25', TO\_DATE('13-JAN-2017 1:20 P.M.','dd-MON-yyyy hh:mi P.M.'), TO\_DATE('27-JAN-2017 2:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 2400, 4600, 'Aflac', 'C7', 'Z90RI3');

INSERT into FaultReport VALUES ('F1', TO\_DATE('05-AUG-2017 4:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 'broken headlight', 'E3', 'EKS456', 'R1');

INSERT into FaultReport VALUES ('F2', TO\_DATE('15-JUN-2017 3:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 'ripped back seat', 'E5', 'M42DKF','R2');

INSERT into FaultReport VALUES ('F3', TO\_DATE('26-JULY-2017 2:00 P.M.','dd-MON-yyyy hh:mi P.M.'), 'scratched side door', 'E5', 'M42DKF', 'R3');

INSERT into FaultReport VALUES ('F4', TO\_DATE('24-SEP-2017 4:30 P.M.','dd-MON-yyyy hh:mi P.M.'), 'flat tire', 'E4', 'FGH132', 'R4');

INSERT into FaultReport VALUES ('F5', TO\_DATE('11-OCT-2017 2:00 P.M.','dd-MON-yyyy hh:mi P.M.'), 'dented bumper', 'E5', 'M42DKF', 'R5');

INSERT into FaultReport VALUES ('F6', TO\_DATE('11-MAR-2017 2:00 P.M.','dd-MON-yyyy hh:mi P.M.'), 'dented bumper', 'E11', 'B56MK5', 'R7');

INSERT into FaultReport VALUES ('F7', TO\_DATE('13-APR-2017 2:00 P.M.','dd-MON-yyyy hh:mi P.M.'), 'blown out speakers', 'E12', 'IW359G', 'R24');

INSERT into FaultReport VALUES ('F8', TO\_DATE('01-OCT-2018 2:00 P.M.','dd-MON-yyyy hh:mi P.M.'), 'broken side mirror', 'E11', 'PW422H', 'R17');

INSERT into FaultReport VALUES ('F9', TO\_DATE('04-DEC-2018 2:00 P.M.','dd-MON-yyyy hh:mi P.M.'), 'broken window', 'E11', 'PW422H', 'R18');

INSERT into FaultReport VALUES ('F10', TO\_DATE('19-NOV-2018 2:00 P.M.','dd-MON-yyyy hh:mi P.M.'), 'burnt tail light', 'E3', 'HM4Y59', 'R11');

INSERT into FaultReport VALUES ('F11', TO\_DATE('30-NOV-2018 2:00 P.M.','dd-MON-yyyy hh:mi P.M.'), 'cracked windshield', 'E3', 'HM4Y59', 'R12');

INSERT into FaultReport VALUES ('F12', TO\_DATE('30-AUG-2018 2:00 P.M.','dd-MON-yyyy hh:mi P.M.'), 'cracked rim', 'E12', 'IW359G', 'R21');

UPDATE Outlet

SET ManagerNo = 'E2'

WHERE outNo = 'O1' OR outNo = 'O2';

UPDATE Outlet

SET ManagerNo = 'E7'

WHERE outNo = 'O3' OR outNo = 'O4';

---------------------------- TABLE CONTENTS --------------------------

SQL> SELECT \* FROM Employee;

EMPNO FNAME LNAME POSITION PHONE EMAIL DOB GENDER SALARY HIREDATE OUTNO SUPERVISORNO

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E6 John Doe Administrative Assistants 810-456-1112 jdoe@fdm.com 24-DEC-88 M 40000 15-NOV-16 O4

E2 Richard Guerra Sales Rep 732-855-7698 rguerra@fdm.com 15-JAN-80 M 100000 01-APR-02 O1 E6

E1 Vijay Singh Sales Rep 732-585-6789 vsingh@fdm.com 01-MAY-94 M 60000 01-JUN-12 O1 E2

E3 Sandra Miller Mechanic 856-787-6777 smiller@fdm.com 18-MAR-96 F 60000 15-APR-14 O2 E2

E4 Anna Tavernier Mechanic 732-378-1002 atavernier@fdm.com 25-FEB-90 F 75000 10-MAR-08 O3 E6

E5 Zach Wayan Mechanic 878-158-1102 zwayan@fdm.com 15-JUL-95 M 75000 01-APR-11 O4 E6

E7 Nick Jones Sales Rep 412-888-5445 njones@fdm.com 15-JAN-90 M 100000 01-JUN-07 O3 E6

E8 Doug Johnson Sales Rep 412-888-5422 djohnson@fdm.com 02-JAN-80 M 50000 01-JUN-10 O1 E1

E9 Joe Jonas Mechanic 412-888-5492 jjonas@fdm.com 02-JAN-91 M 60000 01-JUN-11 O2 E3

E10 Claire Smith Administrative Assistants 412-868-5492 csmith@fdm.com 02-JAN-99 F 75000 01-JUN-13 O3 E7

E11 Sarah Parker Mechanic 412-878-5492 sparker@fdm.com 02-JAN-91 M 90000 05-JUN-13 O1 E2

E12 Travis Scott Mechanic 412-888-5692 tscott@fdm.com 02-JAN-81 M 80000 01-JUN-12 O4 E7

12 rows selected.

SQL> SELECT \* FROM Outlet;

OUTNO STREET CITY STATE ZIPCODE PHONE MANAGERNO

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O1 601 Clyde Street Pittsburgh PA 15213 732-901-0001 E2

O2 5331 Beeler Street Pittsburgh PA 15217 732-901-0002 E2

O3 8 Beechwood Dr Manalapan NJ 07726 732-901-0003 E7

O4 1 Woodward Blvd Freehold NJ 07728 732-901-0004 E7

SQL> SELECT \* FROM Vehicle;

LICENSENO MAKE MODEL COLOR YEAR NODOORS CAPACITY DAILYRATE INSPECTIONDATE OUTNO

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H4W332 JEEP GRAND CHEROKEE WHITE 2018 F 5 44.99 01-MAY-18 O1

DO4642 JEEP CHEROKEE GREY 2010 F 5 37.99 01-MAY-18 O3

Z90RI3 JEEP WRANGLER BLACK 2015 T 5 57.99 01-MAY-18 O4

J2O5NW JEEP PATRIOT BLACK 2013 F 5 34.99 01-MAY-18 O2

J402J3 JEEP COMPASS WHITE 2018 F 5 32.99 01-MAY-18 O1

JF03G2 TOYOTA PRIUS BLUE 2010 F 5 21.99 01-JUN-17 O2

CIG553 TOYOTA CAMRY SILVER 2011 F 5 24.99 01-JUN-16 O3

M42DKF TOYOTA COROLLA RED 2010 F 5 26 01-JUN-16 O4

U6I493 TOYOTA 4RUNNER GREEN 2017 F 5 38 01-JUN-15 O3

IW359G TOYOTA SEQUOIA BRONZE 2015 F 8 52.99 01-DEC-17 O4

EKS456 CHEVROLET MALIBU BRONZE 2010 F 5 27.99 01-OCT-18 O2

IY9EE3 CHEVROLET EQUINOX BLACK 2012 F 5 32 01-OCT-16 O1

FGH132 CHEVROLET SUBURBAN BLACK 2012 F 8 54.99 01-OCT-16 O3

PW422H CHEVROLET TRAVERSE BLACK 2017 F 5 34.99 01-OCT-15 O3

K43TI0 CHEVROLET CAMARO YELLOW 2010 F 4 67 01-OCT-15 O4

IR6GJH DODGE CHALLENGER RED 2011 F 5 53 01-NOV-17 O1

HM4Y59 DODGE CHARGER DARK GREY 2012 F 5 48 01-NOV-18 O2

MB9L53 DODGE CARAVAN WHITE 2013 F 7 37.99 01-NOV-18 O3

B56MK5 DODGE DURANGO BLUE 2014 F 7 32 01-NOV-17 O1

PO4UI3 DODGE DART SILVER 2015 F 5 26 01-NOV-18 O4

20 rows selected.

SQL> SELECT \* FROM Client;

CLIENTNO CLIENTNAME STREET CITY STATE ZIPCODE WEBADDRESS CONTACT\_FNAME CONTACT\_LNAME PHONE EMAIL

-------- -------------------- --------------- ---------- ----- ------- ---------------------------- ------------- ------------- ------------ ----------------------

C1 James Franco 1 Maple St Pittsburgh PA 15213 www.jamesfranco.com James Franco 412-111-1111 jfranco@gmail.com

C2 Sarah Franco 1 Maple St Pittsburgh PA 15213 Sarah Franco 412-111-1112 sfranco@gmail.com

C3 Matt Hammond 9 Porter Road Freehold NJ 07728 www.mhammond.com Matt Hammond 732-111-1113 mhammond@yahoo.com

C4 Amazon 26 Tennent Road Manalapan NJ 07726 www.amazon.com Jeff Bezos 732-111-1114 jbezos@gmail.com

C5 John Luther 5203 Beeler St Pittsburgh PA 15217 www.jluther.com John Luther 412-111-1115 jluther@gmail.com

C6 Jack Bauer 4400 Centre Ave Pittsburgh PA 15213 Jack Bauer 412-111-1116 jbauer@gmail.com

C7 Facebook 4400 Forbes Ave Pittsburgh PA 15213 www.facebook.com Mark Zuckerberg 412-111-1117 ffowler@gmail.com

C8 Blake Griffin 4400 Fifth Ave New York NY 08830 www.blakegriffindor.com Blake Griffin 412-111-1118 bgriffin@gmail.com

C9 Stephen Curry 4400 Second Ave New York NY 08831 www.buckets.com Stephen Curry 412-111-1119 scurry@gmail.com

C10 Lebron James 4400 Third Ave Patterson NJ 07736 www.bronbron.com Lebron James 412-111-1100 ljames@gmail.com

C11 James Harden 4400 Fourth Ave Patterson NJ 07736 www.underrated.com James Harden 412-441-1116 jharden@gmail.com

C12 Saquon Barkley 4400 Eighth Ave Honolulu HI 10110 www.rookieoftheyear.com/2019 Saquon Barkley 402-111-1116 sbarkley@gmail.com

12 rows selected.

SQL> SELECT \* FROM Ragreement;

RENTALNO STARTDATE RETURNDATE MILEAGEBEFORE MILEAGEAFTER INSURANCETYPE CLIE LICENSENO

-------- --------- ---------- ------------- ------------ ------------------------- ---- ----------

R1 01-AUG-17 05-AUG-17 300 700 Aflac C1 EKS456

R2 10-JUN-17 15-JUN-17 15000 15500 Geico C3 M42DKF

R3 18-JUL-17 25-JUL-17 45000 45750 Allstate C4 M42DKF

R4 22-SEP-17 24-SEP-17 60000 60250 Allstate C4 FGH132

R5 09-OCT-17 10-OCT-17 210000 210100 Geico C3 M42DKF

R6 09-JAN-18 10-JAN-18 10000 10100 Geico C2 B56MK5

R7 09-FEB-17 19-FEB-17 10100 11000 Geico C2 B56MK5

R8 09-MAR-17 19-MAR-17 12000 13000 Aflac C1 IR6GJH

R9 09-APR-17 19-APR-17 13100 14000 Aflac C6 IR6GJH

R10 09-MAY-17 19-MAY-17 14100 15000 Aflac C8 IR6GJH

R11 09-NOV-18 18-NOV-18 100 1000 Allstate C5 HM4Y59

R12 20-NOV-18 29-NOV-18 1100 2000 Allstate C10 HM4Y59

R13 01-DEC-18 02-DEC-18 2100 2300 Allstate C12 HM4Y59

R14 03-NOV-17 12-NOV-17 2100 2900 Allstate C4 JF03G2

R15 13-DEC-17 27-DEC-17 3000 6000 Allstate C7 JF03G2

R16 09-OCT-18 19-OCT-18 1000 2000 Allstate C1 PW422H

R17 20-SEP-18 29-SEP-18 1100 2000 Geico C11 PW422H

R18 01-DEC-18 02-DEC-18 2100 2300 Statefarm C2 PW422H

R19 03-DEC-17 12-DEC-17 21000 22000 Allstate C10 DO4642

R20 13-DEC-17 27-DEC-17 22300 22600 Aflac C3 DO4642

R21 09-AUG-18 19-AUG-18 10000 12000 Allstate C1 IW359G

R22 20-JUL-18 29-JUL-18 12100 15000 Geico C9 IW359G

R23 01-NOV-18 02-NOV-18 2100 2300 Statefarm C2 IR6GJH

R24 03-APR-17 12-APR-17 15100 16000 Allstate C8 IW359G

R25 13-JAN-17 27-JAN-17 2400 4600 Aflac C7 Z90RI3

25 rows selected.

SQL> SELECT \* FROM FaultReport;

REPORTNUM DATECHECKED COMMENTS EMPNO LICENSENO RENTALNO

---------- ------------ ------------------------- ----- ---------- --------

F1 05-AUG-17 broken headlight E3 EKS456 R1

F2 15-JUN-17 ripped back seat E5 M42DKF R2

F3 26-JUL-17 scratched side door E5 M42DKF R3

F4 24-SEP-17 flat tire E4 FGH132 R4

F5 11-OCT-17 dented bumper E5 M42DKF R5

F6 11-MAR-17 dented bumper E11 B56MK5 R7

F7 13-APR-17 blown out speakers E12 IW359G R24

F8 01-OCT-18 broken side mirror E11 PW422H R17

F9 04-DEC-18 broken window E11 PW422H R18

F10 19-NOV-18 burnt tail light E3 HM4Y59 R11

F11 30-NOV-18 cracked windshield E3 HM4Y59 R12

F12 30-AUG-18 cracked rim E12 IW359G R21

12 rows selected.

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ PART II.B ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

--------------------------------- Q1 ---------------------------------

SQL> SELECT rentalno, startdate, returndate, mileagebefore, mileageafter,

2 v.licenseno, outno, make, model, year,

3 DECODE(datechecked, NULL, 'N/A', datechecked) faultdate

4 FROM RAGREEMENT r JOIN Vehicle v ON (r.licenseno = v.licenseno)

5 LEFT JOIN faultreport USING (rentalno)

6 ORDER BY rentalno;

RENTALNO STARTDATE RETURNDATE MILEAGEBEFORE MILEAGEAFTER LICENSE OUTNO MAKE MODEL YEAR FAULTDATE

---------- --------- ---------- ------------- ------------ ------- ----- --------------- ---------- ---------- ------------------

R1 01-AUG-17 05-AUG-17 300 700 EKS456 O2 CHEVROLET MALIBU 2010 05-AUG-17

R10 09-MAY-17 19-MAY-17 14100 15000 IR6GJH O1 DODGE CHALLENGER 2011 N/A

R11 09-NOV-18 18-NOV-18 100 1000 HM4Y59 O2 DODGE CHARGER 2012 19-NOV-18

R12 20-NOV-18 29-NOV-18 1100 2000 HM4Y59 O2 DODGE CHARGER 2012 30-NOV-18

R13 01-DEC-18 02-DEC-18 2100 2300 HM4Y59 O2 DODGE CHARGER 2012 N/A

R14 03-NOV-17 12-NOV-17 2100 2900 JF03G2 O2 TOYOTA PRIUS 2010 N/A

R15 13-DEC-17 27-DEC-17 3000 6000 JF03G2 O2 TOYOTA PRIUS 2010 N/A

R16 09-OCT-18 19-OCT-18 1000 2000 PW422H O3 CHEVROLET TRAVERSE 2017 N/A

R17 20-SEP-18 29-SEP-18 1100 2000 PW422H O3 CHEVROLET TRAVERSE 2017 01-OCT-18

R18 01-DEC-18 02-DEC-18 2100 2300 PW422H O3 CHEVROLET TRAVERSE 2017 04-DEC-18

R19 03-DEC-17 12-DEC-17 21000 22000 DO4642 O3 JEEP CHEROKEE 2010 N/A

R2 10-JUN-17 15-JUN-17 15000 15500 M42DKF O4 TOYOTA COROLLA 2010 15-JUN-17

R20 13-DEC-17 27-DEC-17 22300 22600 DO4642 O3 JEEP CHEROKEE 2010 N/A

R21 09-AUG-18 19-AUG-18 10000 12000 IW359G O4 TOYOTA SEQUOIA 2015 30-AUG-18

R22 20-JUL-18 29-JUL-18 12100 15000 IW359G O4 TOYOTA SEQUOIA 2015 N/A

R23 01-NOV-18 02-NOV-18 2100 2300 IR6GJH O1 DODGE CHALLENGER 2011 N/A

R24 03-APR-17 12-APR-17 15100 16000 IW359G O4 TOYOTA SEQUOIA 2015 13-APR-17

R25 13-JAN-17 27-JAN-17 2400 4600 Z90RI3 O4 JEEP WRANGLER 2015 N/A

R3 18-JUL-17 25-JUL-17 45000 45750 M42DKF O4 TOYOTA COROLLA 2010 26-JUL-17

R4 22-SEP-17 24-SEP-17 60000 60250 FGH132 O3 CHEVROLET SUBURBAN 2012 24-SEP-17

R5 09-OCT-17 10-OCT-17 210000 210100 M42DKF O4 TOYOTA COROLLA 2010 11-OCT-17

R6 09-JAN-18 10-JAN-18 10000 10100 B56MK5 O1 DODGE DURANGO 2014 N/A

R7 09-FEB-17 19-FEB-17 10100 11000 B56MK5 O1 DODGE DURANGO 2014 11-MAR-17

R8 09-MAR-17 19-MAR-17 12000 13000 IR6GJH O1 DODGE CHALLENGER 2011 N/A

R9 09-APR-17 19-APR-17 13100 14000 IR6GJH O1 DODGE CHALLENGER 2011 N/A

25 rows selected.

--------------------------------- Q2 ---------------------------------

SQL> SELECT DECODE(outNo, NULL, 'Grand Total', outNo) AS "Outlet",

2 COUNT( DISTINCT licenseno) AS "# of Vehicles",

3 COUNT(DISTINCT rentalno) As "# of Rentals",

4 TRUNC(AVG(MileageAfter - MileageBefore)) As "Avg\_Dist",

5 COUNT(DISTINCT empno) As "# of Employees",

6 COUNT(DISTINCT rentalno)/COUNT(DISTINCT empno) AS "Rentals per Employee"

7 FROM vehicle LEFT JOIN outlet USING (outno)

8 LEFT JOIN (SELECT \* FROM Ragreement

9 WHERE extract(year from StartDate)=extract(year from sysdate) - 1

10 ) USING (LicenseNo)

11 LEFT JOIN Employee USING (outNo)

12 GROUP BY GROUPING SETS (outNo, ());

Outlet # of Vehicles # of Rentals Avg\_Dist # of Employees Rentals per Employee

----------- ------------- ------------ ---------- -------------- --------------------

O1 5 4 925 4 1.00

O2 4 3 1400 2 1.50

O3 6 3 516 3 1.00

O4 5 5 890 3 1.67

Grand Total 20 15 895 12 1.25

--------------------------------- Q3 ---------------------------------

SQL> SELECT DECODE(TO\_CHAR(TO\_DATE(month, 'MM'),'MONTH'), NULL, 'Totals', TO\_CHAR(TO\_DATE(month, 'MM'),'MONTH')) "Month",

2 SUM(DECODE(outno,'O1', dailyrate \* (returndate-startdate),0)) "#1",

3 SUM(DECODE(outno,'O2', dailyrate \* (returndate-startdate),0)) "#2",

4 SUM(DECODE(outno,'O3', dailyrate \* (returndate-startdate),0)) "#3",

5 SUM(DECODE(outno,'O4', dailyrate \* (returndate-startdate),0)) "#4",

6 SUM(dailyrate\*(returndate-startdate)) "Total Revenue",

7 COUNT(rentalno) "Rentals",

8 AVG(dailyrate\*(returndate-startdate)) "Avg"

9 FROM (SELECT level AS month

10 FROM dual

11 CONNECT BY level <= 12)

12 LEFT JOIN (SELECT \* FROM ragreement

13 WHERE EXTRACT(year FROM startdate) = EXTRACT(year FROM sysdate) - 1

14 ) ON month = EXTRACT(month FROM startdate)

15 LEFT JOIN vehicle USING (licenseno)

16 LEFT JOIN outlet USING (outno)

17 GROUP BY GROUPING SETS (month, ())

18 ORDER BY month;

Month #1 #2 #3 #4 Total Revenue Rentals Avg

--------------- ---------- ---------- ---------- ---------- ------------- ---------- ----------

JANUARY $0.00 $0.00 $0.00 $814.68 $814.68 1 $814.68

FEBRUARY $321.33 $0.00 $0.00 $0.00 $321.33 1 $321.33

MARCH $532.21 $0.00 $0.00 $0.00 $532.21 1 $532.21

APRIL $532.21 $0.00 $0.00 $479.49 $1011.69 2 $505.85

MAY $532.21 $0.00 $0.00 $0.00 $532.21 1 $532.21

JUNE $0.00 $0.00 $0.00 $130.14 $130.14 1 $130.14

JULY $0.00 $0.00 $0.00 $180.90 $180.90 1 $180.90

AUGUST $0.00 $114.14 $0.00 $0.00 $114.14 1 $114.14

SEPTEMBER $0.00 $0.00 $110.51 $0.00 $110.51 1 $110.51

OCTOBER $0.00 $0.00 $0.00 $27.26 $27.26 1 $27.26

NOVEMBER $0.00 $198.98 $0.00 $0.00 $198.98 1 $198.98

DECEMBER $0.00 $308.93 $877.46 $0.00 $1186.39 3 $395.46

Totals $1917.96 $622.04 $987.98 $1632.47 $5160.45 15 $344.03

13 rows selected.

--------------------------------- Q4 ---------------------------------

SQL> SELECT DECODE(outno, NULL, 'Total', outno) AS "Outlet",

2 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 1, rentalno)) AS "SUN\_R1",

3 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 2, rentalno)) AS "MON\_R2",

4 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 3, rentalno)) AS "TUE\_R3",

5 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 4, rentalno)) AS "WED\_R4",

6 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 5, rentalno)) AS "THU\_R5",

7 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 6, rentalno)) AS "FRI\_R6",

8 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 7, rentalno)) AS "SAT\_R7",

9 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 1, reportnum)) AS "SUN\_F1",

10 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 2, reportnum)) AS "MON\_F2",

11 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 3, reportnum)) AS "TUE\_F3",

12 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 4, reportnum)) AS "WED\_F4",

13 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 5, reportnum)) AS "THU\_F5",

14 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 6, reportnum)) AS "FRI\_F6",

15 COUNT(DECODE(TO\_CHAR(startdate, 'D'), 7, reportnum)) AS "SAT\_F7",

16 COUNT(rentalno) AS "#\_of\_Rentals",

17 COUNT(reportnum) AS "#\_of\_Reports"

18 FROM (SELECT \*

19 FROM ragreement JOIN vehicle USING (licenseno)

20 WHERE startdate >= ADD\_MONTHS(sysdate,-6) )

21 LEFT JOIN faultreport USING (rentalno)

22 RIGHT JOIN outlet USING (outno)

23 GROUP BY GROUPING SETS(outno, ());

Outlet SUN\_R1 MON\_R2 TUE\_R3 WED\_R4 THU\_R5 FRI\_R6 SAT\_R7 SUN\_F1 MON\_F2 TUE\_F3 WED\_F4 THU\_F5 FRI\_F6 SAT\_F7 #\_of\_Rentals #\_of\_Reports

------ ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------------ ------------

O1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

O2 0 0 1 0 0 1 1 0 0 1 0 0 1 0 3 2

O3 0 0 1 0 1 0 1 0 0 0 0 1 0 1 3 2

O4 0 0 0 0 1 1 0 0 0 0 0 1 0 0 2 1

Total 0 0 2 0 3 2 2 0 0 1 0 2 1 1 9 5

--------------------------------- Q5 ---------------------------------

SQL> SELECT DECODE(Outlet,Null,'Grand Total', Outlet) As "Outlet",

2 managerno || ' ' || fname || ' ' || lname AS "Manager",

3 "#\_of\_Rentals", "Revenue\_per\_Rental", "Faults\_per\_Rental"

4 FROM employee e JOIN (SELECT managerno, COUNT(r.rentalno) AS "#\_of\_Rentals",

5 SUM(dailyrate\*(returndate-startdate))/COUNT(r.rentalno) AS "Revenue\_per\_Rental",

6 COUNT(reportnum)/COUNT(r.rentalno) AS "Faults\_per\_Rental", outlet.outno AS Outlet

7 FROM outlet JOIN employee ON managerno = empno

8 JOIN vehicle v on v.outno = outlet.outno

9 JOIN ragreement r on v.licenseno = r.licenseno

10 LEFT JOIN faultreport f on f.rentalno = r.rentalno

11 GROUP BY GROUPING SETS ((outlet.outno, managerno), managerno)

12 ) t ON e.empno = t.managerno;

Outlet Manager #\_of\_Rentals Revenue\_per\_Rental Faults\_per\_Rental

----------- ------------------------- ------------ ------------------ -----------------

O1 E2 Richard Guerra 6 $334.48 0.17

O2 E2 Richard Guerra 6 $256.73 0.50

Grand Total E2 Richard Guerra 12 $295.60 0.33

O3 E7 Nick Jones 6 $282.07 0.50

O4 E7 Nick Jones 7 $377.67 0.71

Grand Total E7 Nick Jones 13 $333.55 0.62

6 rows selected.

--------------------------------- Q6 ---------------------------------

SQL> (SELECT outno AS "Outlet", TO\_CHAR(revs, '$99990.99') AS "Revenue", 'Max Revenue' AS "Max Vs. Min"

2 FROM (SELECT SUM(dailyrate\*(returndate-startdate)) AS revs, outno, DENSE\_RANK() OVER (ORDER BY SUM(dailyrate\*(returndate-startdate)) DESC) rank

3 FROM ragreement JOIN vehicle USING (licenseno)

4 JOIN outlet USING (outno)

5 WHERE (TO\_CHAR(startdate, 'Q') = '4' AND EXTRACT(year FROM startdate) = EXTRACT(year FROM sysdate) - 1)

6 OR (TO\_CHAR(startdate, 'Q') = '1' AND EXTRACT(year FROM startdate) = EXTRACT(year FROM sysdate))

7 GROUP BY outno)

8 WHERE rank = 1)

9 UNION

10 (SELECT outno AS "Outlet", TO\_CHAR(revs, '$99990.99') AS "Revenue", 'Min Revenue' AS "Max Vs. Min"

11 FROM (SELECT SUM(dailyrate\*(returndate-startdate)) AS revs, outno, DENSE\_RANK() OVER (ORDER BY SUM(dailyrate\*(returndate-startdate)) ASC) rank

12 FROM ragreement JOIN vehicle USING (licenseno)

13 JOIN outlet USING (outno)

14 WHERE (TO\_CHAR(startdate, 'Q') = '4' and EXTRACT(year FROM startdate) = EXTRACT(year FROM sysdate) - 1)

15 OR (TO\_CHAR(startdate, 'Q') = '1' and EXTRACT(year FROM startdate) = EXTRACT(year FROM sysdate))

16 GROUP BY outno)

17 WHERE rank = 1);

Outlet Revenue Max Vs. Min

------ ---------- ------------

O3 $877.46 Max Revenue

O4 $27.26 Min Revenue

--------------------------------- Q7 --------------------------------- (Can’t get this to fit on one page without compromising readability)

SQL> SELECT DECODE(make || ' ' || model, null, make, make || ' ' || model) AS "Make",

2 COUNT(DISTINCT make || ' ' || model) AS "# Of Cars", TRUNC(EXTRACT(year FROM sysdate) - AVG(year)) AS "Avg Age",

3 COUNT(DISTINCT rentalno) As "# of Rentals",

4 NVL(TRUNC(SUM(DECODE(make || ' ' || model, Null, 0, ReturnDate - startdate))),0) "Days Rented",

5 COUNT(DISTINCT reportnum) AS "# of Reports"

6 FROM vehicle LEFT JOIN (SELECT \* FROM ragreement

7 WHERE extract(year from startdate)=extract(year from sysdate)) USING (licenseno)

8 LEFT JOIN (SELECT \* FROM faultreport

9 WHERE extract(year from datechecked)= extract(year from sysdate)) USING (rentalno)

10 GROUP BY CUBE (make, model);

Make # Of Cars Avg Age # of Rentals Days Rented # of Reports

------------------------- ---------- ---------- ------------ ----------- ------------

CHEVROLET CAMARO 1 8 0 0 0

CHEVROLET EQUINOX 1 6 0 0 0

CHEVROLET MALIBU 1 8 0 0 0

CHEVROLET SUBURBAN 1 6 0 0 0

CHEVROLET TRAVERSE 1 1 3 20 2

DODGE CARAVAN 1 5 0 0 0

DODGE CHALLENGER 1 7 1 1 0

DODGE CHARGER 1 6 3 19 2

DODGE DART 1 3 0 0 0

DODGE DURANGO 1 4 1 1 0

JEEP CHEROKEE 1 8 0 0 0

JEEP COMPASS 1 0 0 0 0

JEEP GRAND CHEROKEE 1 0 0 0 0

JEEP PATRIOT 1 5 0 0 0

JEEP WRANGLER 1 3 0 0 0

TOYOTA 4RUNNER 1 1 0 0 0

TOYOTA CAMRY 1 7 0 0 0

TOYOTA COROLLA 1 8 0 0 0

TOYOTA PRIUS 1 8 0 0 0

TOYOTA SEQUOIA 1 3 2 19 1

CHEVROLET 5 4 3 20 2

DODGE 5 5 5 21 2

JEEP 5 3 0 0 0

TOYOTA 5 5 2 19 1

4RUNNER 1 1 0 0 0

CAMARO 1 8 0 0 0

CAMRY 1 7 0 0 0

CARAVAN 1 5 0 0 0

CHALLENGER 1 7 1 1 0

CHARGER 1 6 3 19 2

CHEROKEE 1 8 0 0 0

COMPASS 1 0 0 0 0

COROLLA 1 8 0 0 0

DART 1 3 0 0 0

DURANGO 1 4 1 1 0

EQUINOX 1 6 0 0 0

GRAND CHEROKEE 1 0 0 0 0

MALIBU 1 8 0 0 0

PATRIOT 1 5 0 0 0

PRIUS 1 8 0 0 0

SEQUOIA 1 3 2 19 1

SUBURBAN 1 6 0 0 0

TRAVERSE 1 1 3 20 2

WRANGLER 1 3 0 0 0

20 4 10 60 5

45 rows selected.

--------------------------------- Q8 ---------------------------------

SQL> SELECT TO\_CHAR(startdate, 'Q') AS "Quarter", make,

2 TO\_CHAR(DECODE(COUNT(reportnum)/COUNT(rentalno), 0, 0,COUNT(reportnum)/COUNT(rentalno)), '990.99') AS "Faults\_per\_Rental",

3 DENSE\_RANK() OVER (PARTITION BY TO\_CHAR(startdate, 'Q')

4 ORDER BY COUNT(reportnum)/COUNT(rentalno) DESC) AS "Ranks",

5 COUNT(rentalno) "Rentals\_per\_Quarter"

6 FROM (SELECT \* FROM ragreement

7 WHERE EXTRACT(year FROM startdate) = EXTRACT(year FROM sysdate) - 1)

8 JOIN Vehicle USING (licenseno)

9 LEFT JOIN faultreport USING (rentalno)

10 GROUP BY TO\_CHAR(startdate, 'Q'), make;

Quarter MAKE Faults\_per\_Rental Ranks Rentals\_per\_Quarter

------- ------------------------------ ----------------- ---------- -------------------

1 DODGE 0.50 1 2

1 JEEP 0.00 2 1

2 TOYOTA 1.00 1 2

2 DODGE 0.00 2 2

3 TOYOTA 1.00 1 1

3 CHEVROLET 1.00 1 2

4 TOYOTA 0.33 1 3

4 JEEP 0.00 2 2

8 rows selected.

--------------------------------- Q9 ---------------------------------

SQL> SELECT outno AS "Outlet", clients\_instate AS "Clients in State",

2 rentalcount AS "# Of Rentals in State",

3 rentaltotal AS "Total Rentals",

4 total\_clients AS "Total Clients",

5 DECODE(clients\_instate / total\_clients, 0, 0,clients\_instate / total\_clients) AS "Client Proportions",

6 DECODE(rentalcount / rentaltotal, 0, 0,rentalcount / rentaltotal) AS "Rental Proportions"

7 FROM (SELECT outno, COUNT(DISTINCT clientno) AS clients\_instate,

8 COUNT(rentalNo) AS rentalcount

9 FROM (SELECT \*

10 FROM client JOIN ragreement USING (clientno)

11 JOIN vehicle USING (licenseno)

12 JOIN outlet USING (outno)

13 WHERE Client.state = Outlet.state)

14 GROUP BY outno)

15 LEFT JOIN(SELECT outno, COUNT(DISTINCT clientno) AS total\_clients,

16 COUNT(rentalNo) AS rentaltotal

17 FROM (SELECT \*

18 FROM client JOIN ragreement USING (clientno)

19 JOIN vehicle USING (licenseno)

20 JOIN outlet USING (outno))

21 GROUP BY outno) USING (outno)

22 GROUP BY (outno, clients\_instate, rentalcount, rentaltotal, total\_clients);

Outlet Clients in State # Of Rentals in State Total Rentals Total Clients Client Proportions Rental Proportions

------ ---------------- --------------------- ------------- ------------- ------------------ ------------------

O2 3 3 6 6 0.50 0.50

O1 3 5 6 4 0.75 0.83

O3 4 4 6 6 0.67 0.67

O4 2 3 7 6 0.33 0.43

--------------------------------- Q10 ---------------------------------

SQL> SELECT LEVEL, LPAD(' ', 3\*(LEVEL - 1)) || i.empNo || ' ' ||

2 (CASE

3 WHEN Gender = 'M'

4 THEN 'MR.'

5 ELSE 'MS.'

6 END) || ' ' || fname || ' ' || lname as "Employee", position, street,

7 (SELECT NVL(COUNT(ReportNum),0)

8 FROM FaultReport f

9 WHERE f.empNo = i.empNo

10 AND (sysdate - DateChecked) <= 90) AS "# of Reports (< 90 days)"

11 FROM Employee i JOIN Outlet USING (outNo)

12 START WITH empNo = 'E6'

13 CONNECT BY PRIOR empNo = supervisorNo;

LEVEL Employee POSITION STREET # of Reports (< 90 days)

---------- ------------------------------ ------------------------- -------------------- ------------------------

1 E6 MR. John Doe Administrative Assistants 1 Woodward Blvd 0

2 E2 MR. Richard Guerra Sales Rep 601 Clyde Street 0

3 E1 MR. Vijay Singh Sales Rep 601 Clyde Street 0

4 E8 MR. Doug Johnson Sales Rep 601 Clyde Street 0

3 E11 MR. Sarah Parker Mechanic 601 Clyde Street 2

3 E3 MS. Sandra Miller Mechanic 5331 Beeler Street 2

4 E9 MR. Joe Jonas Mechanic 5331 Beeler Street 0

2 E4 MS. Anna Tavernier Mechanic 8 Beechwood Dr 0

2 E5 MR. Zach Wayan Mechanic 1 Woodward Blvd 0

2 E7 MR. Nick Jones Sales Rep 8 Beechwood Dr 0

3 E10 MS. Claire Smith Administrative Assistants 8 Beechwood Dr 0

3 E12 MR. Travis Scott Mechanic 1 Woodward Blvd 0

12 rows selected.