```sql
-- Assignment 9 - Part 1
-- Due April 18, 2018
-- Team: Kaylee Thomas, Madeline Cowgill, Shivani Patel, Aziz Arrak

/* Database Systems, Coronel/Morris */
/* Type of SQL : SQL Server */

CREATE TABLE MODEL
(
MOD_CODE varchar(10) NOT NULL,
MOD_MANUFACTURER varchar(15),
MOD_NAME varchar(20),
MOD_SEATS float(8),
MOD_CHG_MILE float(8)
);

ALTER TABLE MODEL
ADD CONSTRAINT PK_MODEL PRIMARY KEY (MOD_CODE)

/* -- */

CREATE TABLE AIRCRAFT
(
AC_NUMBER varchar(5) NOT NULL,
MOD_CODE varchar(10),
AC_TTAF float(8),
AC_TTEL float(8),
AC_TTER float(8)
);

ALTER TABLE AIRCRAFT
ADD CONSTRAINT PK_AIRCRAFT PRIMARY KEY (AC_NUMBER),
        CONSTRAINT FK_AIRCRAFT_MODEL FOREIGN KEY (MOD_CODE) REFERENCES MODEL

/* -- */

CREATE TABLE CUSTOMERAVIATION
(
CUS_CODE int NOT NULL,
CUS_LNAME varchar(15),
CUS_FNAME varchar(15),
CUS_INITIAL varchar(1),
CUS_AREACODE varchar(3),
CUS_PHONE varchar(8),
CUS_BALANCE float(8)
);

ALTER TABLE CUSTOMERAVIATION
ADD CONSTRAINT PK_CUSTOMERAVIATION PRIMARY KEY (CUS_CODE)

/* -- */

CREATE TABLE CHARTER
(
CHAR_TRIP int NOT NULL,
CHAR_DATE datetime,
AC_NUMBER varchar(5),
CHAR_DESTINATION varchar(3),
CHAR_DISTANCE float(8),
CHAR_HOURS_FLOWN float(8),
CHAR_HOURS_WAIT float(8),
CHAR_FUEL_GALLONS float(8),
CHAR_OIL_QTS integer,
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CUS_CODE int
);

ALTER TABLE CHARTER
ADD CONSTRAINT PK_CHARTER PRIMARY KEY (CHAR_TRIP),
        CONSTRAINT FK_CHARTER_CUSTOMERAVIATION FOREIGN KEY (CUS_CODE) REFERENCES
CUSTOMERAVIATION,
        CONSTRAINT FK_CHARTER_AIRCRAFT FOREIGN KEY (AC_NUMBER) REFERENCES AIRCRAFT

/* -- */

CREATE TABLE EMPLOYEE
(
EMP_NUM int NOT NULL,
EMP_TITLE varchar(4),
EMP_LNAME varchar(15),
EMP_FNAME varchar(15),
EMP_INITIAL varchar(1),
EMP_DOB datetime,
EMP_HIRE_DATE datetime
);

ALTER TABLE EMPLOYEE
ADD CONSTRAINT PK_EMPLOYEE PRIMARY KEY (EMP_NUM)

/* -- */

CREATE TABLE CREW
(
CHAR_TRIP int NOT NULL ,
EMP_NUM int NOT NULL,
CREW_JOB varchar(20)
);

ALTER TABLE CREW
ADD CONSTRAINT PK_CREW PRIMARY KEY (CHAR_TRIP, EMP_NUM),
        CONSTRAINT FK_CREW_CHARTER FOREIGN KEY (CHAR_TRIP) REFERENCES CHARTER,
        CONSTRAINT FK_CREW_EMPLOYEE FOREIGN KEY (EMP_NUM) REFERENCES EMPLOYEE

/* -- */

CREATE TABLE PILOT
(
EMP_NUM int NOT NULL,
PIL_LICENSE varchar(25),
PIL_RATINGS varchar(25),
PIL_MED_TYPE varchar(1),
PIL_MED_DATE datetime,
PIL_PT135_DATE datetime
);

ALTER TABLE PILOT
ADD CONSTRAINT PK_PILOT PRIMARY KEY (EMP_NUM),
CONSTRAINT FK_PILOT_EMPLOYEE FOREIGN KEY (EMP_NUM) REFERENCES EMPLOYEE

/* -- */

CREATE TABLE RATING
(
RTG_CODE varchar(5) NOT NULL,
RTG_NAME varchar(50)
);
```

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ALTER TABLE RATING
ADD CONSTRAINT PK_RATING PRIMARY KEY (RTG_CODE)

/* -- */

CREATE TABLE EARNEDRATING
(
EMP_NUM int NOT NULL,
RTG_CODE varchar(5) NOT NULL,
EARNRTG_DATE datetime
);

ALTER TABLE EARNEDRATING
ADD CONSTRAINT PK_EARNEDRATING PRIMARY KEY (RTG_CODE, EMP_NUM),
        CONSTRAINT FK_EARNEDRATING_RATING FOREIGN KEY (RTG_CODE) REFERENCES RATING,
        CONSTRAINT FK_EARNEDRATING_EMPLOYEE FOREIGN KEY (EMP_NUM) REFERENCES EMPLOYEE

/* -- */
INSERT INTO MODEL VALUES('C-90A','Beechcraft','KingAir','8','2.67');
INSERT INTO MODEL VALUES('PA23-250','Piper','Aztec','6','1.93');
INSERT INTO MODEL VALUES('PA31-350','Piper','Navajo Chieftain','10','2.35');

/* -- */

INSERT INTO AIRCRAFT VALUES('1484P','PA23-250','1833.1','1833.1','101.8');
INSERT INTO AIRCRAFT VALUES('2289L','C-90A','4243.8','768.9','1123.4');
INSERT INTO AIRCRAFT VALUES('2778V','PA31-350','7992.9','1513.1','789.5');
INSERT INTO AIRCRAFT VALUES('4278Y','PA31-350','2147.3','622.1','243.2');

/* -- */

INSERT INTO CUSTOMERAVIATION VALUES('10010','Ramas','Alfred','A','615','844-2573','0');
INSERT INTO CUSTOMERAVIATION VALUES('10011','Dunne','Leona','K','713','894-1238','0');
INSERT INTO CUSTOMERAVIATION VALUES('10012','Smith','Kathy','W','615','894-
2285','896.54');
INSERT INTO CUSTOMERAVIATION VALUES('10013','Olowski','Paul','F','615','894-
2180','1285.19');
INSERT INTO CUSTOMERAVIATION VALUES('10014','Orlando','Myron','','615','222-
1672','673.21');
INSERT INTO CUSTOMERAVIATION VALUES('10015','O''Brian','Amy','B','713','442-
3381','1014.56');
INSERT INTO CUSTOMERAVIATION VALUES('10016','Brown','James','G','615','297-1228','0');
INSERT INTO CUSTOMERAVIATION VALUES('10017','Williams','George','','615','290-2556','0');
INSERT INTO CUSTOMERAVIATION VALUES('10018','Farriss','Anne','G','713','382-7185','0');
INSERT INTO CUSTOMERAVIATION VALUES('10019','Smith','Olette','K','615','297-
3809','453.98');

/* -- */

INSERT INTO CHARTER
VALUES('10001','2/5/2016','2289L','ATL','936','5.1','2.2','354.1','1','10011');
INSERT INTO CHARTER
VALUES('10002','2/5/2016','2778V','BNA','320','1.6','0','72.6','0','10016');
INSERT INTO CHARTER
VALUES('10003','2/5/2016','4278Y','GNV','1574','7.8','0','339.8','2','10014');
INSERT INTO CHARTER
VALUES('10004','2/6/2016','1484P','STL','472','2.9','4.9','97.2','1','10019');
INSERT INTO CHARTER
VALUES('10005','2/6/2016','2289L','ATL','1023','5.7','3.5','397.7','2','10011');
INSERT INTO CHARTER
VALUES('10006','2/6/2016','4278Y','STL','472','2.6','5.2','117.1','0','10017');
INSERT INTO CHARTER
VALUES('10007','2/6/2016','2778V','GNV','1574','7.9','0','348.4','2','10012');
```

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INSERT INTO CHARTER
VALUES('10008','2/7/2016','1484P','TYS','644','4.1','0','140.6','1','10014');
INSERT INTO CHARTER
VALUES('10009','2/7/2016','2289L','GNV','1574','6.6','23.4','459.9','0','10017');
INSERT INTO CHARTER
VALUES('10010','2/7/2016','4278Y','ATL','998','6.2','3.2','279.7','0','10016');
INSERT INTO CHARTER
VALUES('10011','2/7/2016','1484P','BNA','352','1.9','5.3','66.4','1','10012');
INSERT INTO CHARTER
VALUES('10012','2/8/2016','2778V','MOB','884','4.8','4.2','215.1','0','10010');
INSERT INTO CHARTER
VALUES('10013','2/8/2016','4278Y','TYS','644','3.9','4.5','174.3','1','10011');
INSERT INTO CHARTER
VALUES('10014','2/9/2016','4278Y','ATL','936','6.1','2.1','302.6','0','10017');
INSERT INTO CHARTER
VALUES('10015','2/9/2016','2289L','GNV','1645','6.7','0','459.5','2','10016');
INSERT INTO CHARTER
VALUES('10016','2/9/2016','2778V','MQY','312','1.5','0','67.2','0','10011');
INSERT INTO CHARTER
VALUES('10017','2/10/2016','1484P','STL','508','3.1','0','105.5','0','10014');
INSERT INTO CHARTER
VALUES('10018','2/10/2016','4278Y','TYS','644','3.8','4.5','167.4','0','10017');

/* -- */

INSERT INTO EMPLOYEE VALUES('100','Mr.','Kolmycz','George','D','6/15/1952','3/15/2007');
INSERT INTO EMPLOYEE VALUES('101','Ms.','Lewis','Rhonda','G','3/19/1975','4/25/2008');
INSERT INTO EMPLOYEE VALUES('102','Mr.','VanDam','Rhett','','11/14/1968','12/20/2012');
INSERT INTO EMPLOYEE VALUES('103','Ms.','Jones','Anne','M','10/16/1984','8/28/2015');
INSERT INTO EMPLOYEE VALUES('104','Mr.','Lange','John','P','11/8/1981','10/20/2006');
INSERT INTO EMPLOYEE VALUES('105','Mr.','Williams','Robert','D','3/14/1985','1/8/2015');
INSERT INTO EMPLOYEE VALUES('106','Mrs.','Duzak','Jeanine','K','2/12/1978','1/5/2011');
INSERT INTO EMPLOYEE VALUES('107','Mr.','Diante','Jorge','D','8/21/1984','7/2/2006');
INSERT INTO EMPLOYEE
VALUES('108','Mr.','Wiesenbach','Paul','R','2/14/1976','11/18/2014');
INSERT INTO EMPLOYEE
VALUES('109','Ms.','Travis','Elizabeth','K','6/18/1971','4/14/2011');
INSERT INTO EMPLOYEE
VALUES('110','Mrs.','Genkazi','Leighla','W','5/19/1980','12/1/2012');

/* -- */

INSERT INTO CREW VALUES('10001','104','Pilot');
INSERT INTO CREW VALUES('10002','101','Pilot');
INSERT INTO CREW VALUES('10003','105','Pilot');
INSERT INTO CREW VALUES('10003','109','Copilot');
INSERT INTO CREW VALUES('10004','106','Pilot');
INSERT INTO CREW VALUES('10005','101','Pilot');
INSERT INTO CREW VALUES('10006','109','Pilot');
INSERT INTO CREW VALUES('10007','104','Pilot');
INSERT INTO CREW VALUES('10007','105','Copilot');
INSERT INTO CREW VALUES('10008','106','Pilot');
INSERT INTO CREW VALUES('10009','105','Pilot');
INSERT INTO CREW VALUES('10010','108','Pilot');
INSERT INTO CREW VALUES('10011','101','Pilot');
INSERT INTO CREW VALUES('10011','104','Copilot');
INSERT INTO CREW VALUES('10012','101','Pilot');
INSERT INTO CREW VALUES('10013','105','Pilot');
INSERT INTO CREW VALUES('10014','106','Pilot');
INSERT INTO CREW VALUES('10015','101','Copilot');
INSERT INTO CREW VALUES('10015','104','Pilot');
INSERT INTO CREW VALUES('10016','105','Copilot');
INSERT INTO CREW VALUES('10016','109','Pilot');
```

```sql
INSERT INTO CREW VALUES('10017','101','Pilot');
INSERT INTO CREW VALUES('10018','104','Copilot');
INSERT INTO CREW VALUES('10018','105','Pilot');

/* -- */

INSERT INTO PILOT VALUES('101','ATP','SEL/MEL/Instr/CFII','1','4/12/2016','6/15/2015');
INSERT INTO PILOT VALUES('104','ATP','SEL/MEL/Instr','1','6/10/2015','3/23/2016');
INSERT INTO PILOT VALUES('105','COM','SEL/MEL/Instr/CFI','2','2/25/2016','2/12/2016');
INSERT INTO PILOT VALUES('106','COM','SEL/MEL/Instr','2','4/2/2016','12/24/2015');
INSERT INTO PILOT
VALUES('109','COM','SEL/MEL/SES/Instr/CFII','1','4/14/2016','4/21/2016');

/* -- */

INSERT INTO RATING VALUES('CFI','Certified Flight Instructor');
INSERT INTO RATING VALUES('CFII','Certified Flight Instructor, Instrument');
INSERT INTO RATING VALUES('INSTR','Instrument');
INSERT INTO RATING VALUES('MEL','Multiengine Land');
INSERT INTO RATING VALUES('SEL','Single Engine, Land');
INSERT INTO RATING VALUES('SES','Single Engine, Sea');

/* -- */

INSERT INTO EARNEDRATING VALUES('101','CFI','2/18/2004');
INSERT INTO EARNEDRATING VALUES('101','CFII','12/15/2011');
INSERT INTO EARNEDRATING VALUES('101','INSTR','11/8/1999');
INSERT INTO EARNEDRATING VALUES('101','MEL','6/23/2000');
INSERT INTO EARNEDRATING VALUES('101','SEL','4/21/1999');
INSERT INTO EARNEDRATING VALUES('104','INSTR','7/15/2002');
INSERT INTO EARNEDRATING VALUES('104','MEL','1/29/2003');
INSERT INTO EARNEDRATING VALUES('104','SEL','3/12/2001');
INSERT INTO EARNEDRATING VALUES('105','CFI','11/18/2003');
INSERT INTO EARNEDRATING VALUES('105','INSTR','4/17/2001');
INSERT INTO EARNEDRATING VALUES('105','MEL','8/12/2001');
INSERT INTO EARNEDRATING VALUES('105','SEL','9/23/2000');
INSERT INTO EARNEDRATING VALUES('106','INSTR','12/20/2001');
INSERT INTO EARNEDRATING VALUES('106','MEL','4/2/2002');
INSERT INTO EARNEDRATING VALUES('106','SEL','3/10/2000');
INSERT INTO EARNEDRATING VALUES('109','CFI','11/5/2004');
INSERT INTO EARNEDRATING VALUES('109','CFII','6/21/2009');
INSERT INTO EARNEDRATING VALUES('109','INSTR','7/23/2002');
INSERT INTO EARNEDRATING VALUES('109','MEL','3/15/2003');
INSERT INTO EARNEDRATING VALUES('109','SEL','2/5/2002');
INSERT INTO EARNEDRATING VALUES('109','SES','5/12/2002');
```