```
Create table AIRPORT
(
Airport_code NVARCHAR(5) PRIMARY KEY NOT NULL,
AName NVARCHAR(50) NOT NULL,
City NVARCHAR(20) NOT NULL,
AState NVARCHAR(20) NOT NULL,
);
Create table FLIGHT
(
Flight_number INT PRIMARY KEY NOT NULL,
Airline NVARCHAR(50) NOT NULL,
Weekdays NVARCHAR(9) NOT NULL,
);
Create table FLIGHT_LEG
(
Flight_number INT NOT NULL,
Leg_number INT NOT NULL,
Departure_airport_code NVARCHAR(5) NOT NULL,
Scheduled_departure_time TIME NOT NULL,
Arrival_airport_code NVARCHAR(5) NOT NULL,
Scheduled_arrival_time TIME NOT NULL,
```

```
PRIMARY KEY(Flight_number,Leg_number),
FOREIGN KEY (Flight_number) references FLIGHT(Flight_number),
FOREIGN
               KEY
                           (Departure_airport_code)
                                                       references
AIRPORT(Airport_code),
FOREIGN
                KEY
                            (Arrival airport code)
                                                       references
AIRPORT(Airport_code),
);
Create table AIRPLANE_TYPE
(
Airplane_type_name NVARCHAR(50) NOT NULL,
Max_seats INT NOT NULL,
Company NVARCHAR(50) NOT NULL,
PRIMARY KEY (Airplane_type_name),
);
Create table AIRPLANE
(
Airplane_id INT NOT NULL,
Total_number_of_seats INT NOT NULL,
Airplane_type NVARCHAR(50) NOT NULL,
PRIMARY KEY(Airplane_id),
FOREIGN
                  KEY
                                (Airplane_type)
                                                       references
AIRPLANE_TYPE(Airplane_type_name),
);
```

```
Create table LEG_INSTANCE
(
Flight_number INT NOT NULL,
Leg_number INT NOT NULL,
LDate DATE NOT NULL,
Number_of_available_seats INT NOT NULL,
Airplane_id INT NOT NULL,
Departure_airport_code NVARCHAR(5) NOT NULL,
Departure_time TIME NOT NULL,
Arrival_airport_code NVARCHAR(5) NOT NULL,
Arrival_time TIME NOT NULL,
PRIMARY KEY (Flight_number,Leg_number,Ldate),
FOREIGN
              KEY
                        (Flight_number,Leg_number)
                                                       references
FLIGHT_LEG(Flight_number,Leg_number),
FOREIGN KEY (Airplane_id) references AIRPLANE(Airplane_id),
FOREIGN
                KEY
                           (Departure_airport_code)
                                                       references
AIRPORT(Airport_code),
FOREIGN
                KEY
                            (Arrival_airport_code)
                                                       references
AIRPORT(Airport_code),
);
Create table FARE
Flight_number INT NOT NULL,
```

```
Fare_code CHAR NOT NULL,
Amount MONEY NOT NULL,
Restrictions NVARCHAR(50),
PRIMARY KEY(Flight_number, Fare_code),
FOREIGN KEY (Flight_number) references FLIGHT(Flight_number),
);
Create table CAN_LAND
(
Airplane_type_name NVARCHAR(50) NOT NULL,
Airport_code NVARCHAR(5) NOT NULL,
PRIMARY KEY (Airplane_type_name, Airport_code),
FOREIGN
                KEY
                            (Airplane_type_name)
                                                      references
AIRPLANE_TYPE(Airplane_type_name),
FOREIGN KEY (Airport_code) references AIRPORT(Airport_code)
);
Create table SEAT_RESERVATION
(
Flight_number INT NOT NULL,
Leg_number INT NOT NULL,
SDate DATE NOT NULL,
Seat_number NVARCHAR(4) NOT NULL,
```

Customer_name NVARCHAR(30) NOT NULL,

Customer_phone NVARCHAR(15) NOT NULL,

PRIMARY KEY(Flight_number,Leg_number,SDate,Seat_number),

FOREIGN KEY (Flight_number,Leg_number,SDate) references LEG_INSTANCE(Flight_number,Leg_number,LDate),
);

INSERT INTO AIRPORT(Airport_code,AName,City,AState) values ('LAX','Los Angeles International Airport','Los Angeles','California')

INSERT INTO AIRPORT(Airport_code,AName,City,AState) values ('ORD','OHare International Airport','Chicago','Illinois')

INSERT INTO AIRPORT(Airport_code,AName,City,AState) values ('DFW','Dallas Fort Worth International Airport','Dallas','Texas')

INSERT INTO AIRPORT(Airport_code,AName,City,AState) values ('SFO','San Francisco International Airport','San Francisco','California')

INSERT INTO AIRPORT(Airport_code,AName,City,AState) values ('WHP','Whiteman Airport','Los Angeles','California')

INSERT INTO AIRPORT(Airport_code, AName, City, AState) values ('JFK', 'Jon F Kennedy International Airport', 'New York', 'New York')

INSERT INTO AIRPORT(Airport_code,AName,City,AState) values ('BOS','Logan International Airport','Boston','Massachusetts')

INSERT INTO AIRPORT(Airport_code, AName, City, AState) values ('MCO', 'Orlando International Airport', 'Orlando', 'Florida')

INSERT INTO AIRPORT(Airport_code, AName, City, AState) values ('MIA', 'Miami International Airport', 'Miami', 'Florida')

INSERT INTO FLIGHT(Flight_number,Airline,Weekdays) values (1111,'Allegiant','M-T-W-T-F')

INSERT INTO FLIGHT(Flight_number,Airline,Weekdays) values (2222,'Delta','M-T-W')

INSERT INTO FLIGHT(Flight_number,Airline,Weekdays) values (3333,'JetBlue','S-S')

INSERT INTO FLIGHT(Flight_number,Airline,Weekdays) values (4444,'Southwest','M-W-T')

INSERT INTO FLIGHT(Flight_number,Airline,Weekdays) values (5555,'THY','M-F')

INSERT INTO FLIGHT(Flight_number,Airline,Weekdays) values (6666,'Delta','S-S')

INSERT INTO FLIGHT(Flight_number,Airline,Weekdays) values (7777,'Southwest','M-W-T')

INSERT INTO FLIGHT(Flight_number,Airline,Weekdays) values (8888,'THY','M-W-T')

INSERT INTO FLIGHT(Flight_number,Airline,Weekdays) values (9999,'Silver','W-S-S')

INSERT INTO FLIGHT(Flight_number,Airline,Weekdays) values (1122,'Allegiant','M-T-W-T-F')

INSERT INTO FLIGHT(Flight_number,Airline,Weekdays) values (2233,'Allegiant','M-T-W-T-F')

INSERT INTO FARE(Flight_number,Fare_code,Amount,Restrictions) values (1111,'J',3000,null)

INSERT INTO FARE(Flight_number,Fare_code,Amount,Restrictions) values (1111,'M',500,'Three Days')

INSERT INTO FARE(Flight_number,Fare_code,Amount,Restrictions) values (1111,'T',300,'Two Days')

INSERT INTO FARE(Flight_number,Fare_code,Amount,Restrictions) values (2222,'M',620,'Five Days')

INSERT INTO FARE(Flight_number,Fare_code,Amount,Restrictions) values (3333,'X',200,'One Day')

INSERT INTO FARE(Flight_number,Fare_code,Amount,Restrictions) values (4444,'F',4000,null)

INSERT INTO FARE(Flight_number,Fare_code,Amount,Restrictions) values (5555,'F',5200,null)

INSERT INTO FARE(Flight_number,Fare_code,Amount,Restrictions) values (5555,'N',410,'Three Days')

INSERT INTO FARE(Flight_number,Fare_code,Amount,Restrictions) values (8888,'V',450,'Four Days')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (1111,1,'LAX','16:00','ORD','18:00')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (1122,1,'LAX','01:30','BOS','03:10')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (1111,2,'BOS','05:00','ORD','10:10')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (2222, 1,'SFO','14:00','WHP','15:00')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (2222, 2,'WHP','16:55','MCO','20:55')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (3333, 1,'BOS','09:00','WHP','12:00')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (3333, 2,'WHP','08:20','MCO','09:45')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (4444, 1,'MCO','05:55','ORD','07:45')

INSERT

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (4444, 2,'ORD','08:30','WHP','09:45')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (4444, 3,'WHP','06:00','BOS','10:10')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (4444, 4,'BOS','11:15','LAX','12:35')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (2233, 1,'SFO','14:55','DFW','18:00')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (7777, 1,'MCO','11:15','JFK','12:35')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (7777, 2,'JFK','13:00','MIA','14:20')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (6666, 1, 'DFW','19:20','WHP','20:45')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (8888, 1,'MIA','19:20','BOS','20:45')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (5555, 1, 'BOS','22:15','ORD','00:35')

INSERT INTO

FLIGHT_LEG(Flight_number,Leg_number,Departure_airport_code,Schedu led_departure_time,Arrival_airport_code,Scheduled_arrival_time) values (9999, 1,'MIA','06:00','JFK','10:10')

INSERT INTO

AIRPLANE_TYPE(Airplane_type_name,Max_seats,Company) values ('B747-81',605, 'Boeing')

INSERT INTO

AIRPLANE_TYPE(Airplane_type_name,Max_seats,Company) values ('B777-300ER',550, 'Boeing')

INTO INSERT AIRPLANE_TYPE(Airplane_type_name,Max_seats,Company) values ('A850',853, 'Airbus') **INSERT INTO** AIRPLANE_TYPE(Airplane_type_name,Max_seats,Company) values('A340-600',475, 'Airbus') **INSERT INTO** AIRPLANE_TYPE(Airplane_type_name, Max_seats, Company) values('11-96M',436, 'Iijushne') **INSERT INTO** AIRPLANE_TYPE(Airplane_type_name,Max_seats,Company) values('L-1011 TriStar',400, 'Lockheed') **INSERT INTO** AIRPLANE_TYPE(Airplane_type_name,Max_seats,Company) values('MD-11',410, 'McDanell Douglas') **INSERT INTO** AIRPLANE(Airplane_id,Total_number_of_seats,Airplane_type) values (9898,650,'B747-81') **INSERT INTO** AIRPLANE(Airplane_id,Total_number_of_seats,Airplane_type) values (8787,650,'B747-81') **INSERT INTO** AIRPLANE(Airplane_id,Total_number_of_seats,Airplane_type) values(7676,600,'B777-300ER') **INSERT INTO** AIRPLANE(Airplane_id,Total_number_of_seats,Airplane_type) values(6565,510,'A340-600') **INSERT INTO** AIRPLANE(Airplane_id,Total_number_of_seats,Airplane_type) values(5454,470,'11-96M')

INSERT INTO

AIRPLANE(Airplane_id,Total_number_of_seats,Airplane_type) values(4343,430,'MD-11')

INSERT INTO

AIRPLANE(Airplane_id,Total_number_of_seats,Airplane_type) values(3232,430,'MD-11')

INSERT INTO

AIRPLANE(Airplane_id,Total_number_of_seats,Airplane_type) values(2121,450,'L-1011 TriStar')

INSERT INTO

AIRPLANE(Airplane_id,Total_number_of_seats,Airplane_type) values(1010,850,'A850')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(1111, 1, '2017-02-18', 600, 9898,'LAX','16:00','ORD','19:00')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(1122, 1, '2017-08-28', 600, 9898,'LAX','01:30','BOS','03:10')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(1111, 2, '2017-08-28', 800, 1010,'BOS','05:00','ORD','10:10')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(2222, 1,'2017-05-11', 420, 5454,'SFO','14:00','WHP','15:00')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code,

Departure_time, Arrival_airport_code, Arrival_time) values(2222, 2,'2017-05-12', 400, 2121,'WHP','16:55','MCO','20:55')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(3333, 1, '2017-05-12', 400, 6565,'BOS','09:00','WHP','12:00')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(3333, 2, '2017-05-13', 400, 6565, 'WHP', '08:20', 'MCO', '09:45')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(4444, 1,'2017-05-19', 400, 6565,'MCO','05:55','ORD','07:45')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(4444, 2, '2017-05-19', 400, 9898, 'ORD', '08:30', 'WHP', '09:45')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(4444, 3,'2017-05-20', 400, 5454,'WHP','06:00','BOS','10:10')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(4444, 4, '2017-05-20', 400, 8787,'BOS','11:15','LAX','12:35')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(2233, 1,'2017-06-20', 430, 3232,'SFO','14:55','DFW','18:00')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code,

Departure_time, Arrival_airport_code, Arrival_time) values(7777, 1,'2017-07-20', 400, 8787,'MCO','11:15','JFK','12:35')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(7777, 2,'2017-07-20', 400, 5454,'JFK','13:00','MIA','14:20')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(6666, 1, '2017-12-20', 400, 8787,'DFW','19:20','WHP','20:45')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(8888, 1,'2017-01-20', 400, 5454,'MIA','19:20','BOS','20:45')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(5555, 1, '2017-02-06', 400, 8787,'BOS','22:15','ORD','00:35')

INSERT INTO LEG_INSTANCE(Flight_number, Leg_number, LDate, Number_of_available_seats, Airplane_id, Departure_airport_code, Departure_time, Arrival_airport_code, Arrival_time) values(9999, 1,'2017-11-28', 400, 5454,'MIA','06:00','JFK','10:10')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('B747-81', 'LAX')

INSERT INTO CAN_LAND(Airplane_type_name, Airport_code) values ('B747-81', 'ORD')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('B747-81', 'BOS')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('B747-81', 'MCO')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('B747-81', 'WHP')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('B747-81', 'JFK')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('B747-81', 'DFW')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('A850', 'BOS')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('A850', 'ORD')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('A850', 'SFO')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('A850', 'MCO')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('11-96M', 'SFO')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('11-96M', 'WHP')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('11-96M', 'BOS')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('11-96M', 'DFW')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('11-96M', 'JFK')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('11-96M', 'MIA')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('L-1011 TriStar', 'BOS')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('L-1011 TriStar', 'WHP')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('L-1011 TriStar', 'MCO')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('A340-600', 'BOS')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('A340-600', 'WHP')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('A340-600', 'MCO')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('A340-600', 'ORD')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('MD-11', 'SFO')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('MD-11', 'DFW')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('MD-11', 'MIA')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('MD-11', 'BOS')

INSERT INTO CAN_LAND(Airplane_type_name,Airport_code) values ('B777-300ER', 'BOS')

INSERT INTO SEAT_RESERVATION(Flight_number, Leg_number, SDate, Seat_number, Customer_name, Customer_phone) values (1111, 1,'2017-02-18','17A','Stefan ZWEIG', '05360000000')

INSERT INTO SEAT_RESERVATION(Flight_number, Leg_number, SDate, Seat_number, Customer_name, Customer_phone) values (1122, 1,'2017-08-28','15B','Franz KAFKA', '05361111111')

INSERT INTO SEAT_RESERVATION(Flight_number, Leg_number, SDate, Seat_number, Customer_name, Customer_phone) values (1111, 2,'2017-08-28','3A','Albert CAMUS', '05362222222')

INSERT INTO SEAT_RESERVATION(Flight_number, Leg_number, SDate, Seat_number, Customer_name, Customer_phone) values (7777, 2,'2017-07-20','4F','George ORWELL', '05363333333')

INSERT INTO SEAT_RESERVATION(Flight_number, Leg_number, SDate, Seat_number, Customer_name, Customer_phone) values (2233, 1,'2017-06-20','12A','Amir MAALOUF', '05364444444')

INSERT INTO SEAT_RESERVATION(Flight_number, Leg_number, SDate, Seat_number, Customer_name, Customer_phone) values (5555, 1,'2017-02-06','19C','Jean Paul SARTRE', '0536555555')

INSERT INTO SEAT_RESERVATION(Flight_number, Leg_number, SDate, Seat_number, Customer_name, Customer_phone) values (8888, 1,'2017-01-20','9D','Simone de BEAUVOIR', '0536555555')