1. .

FLIGHT\_LEG.Flight\_number -> FLIGHT.Flight\_number

LEG\_INSTANCE.Flight\_number -> FLIGHT.Flight\_number

LEG\_INSTANCE.Leg\_number -> FLIGHT\_LEG.Leg\_number

FARE.Flight\_number -> FLIGHT.Flight\_number

CAN\_LAND.Airplane\_type\_name -> AIRPLANE\_TYPE.Airplane\_type\_name

CAN\_LAND.Airport\_code -> AIRPORT.Airport\_code

SEAT\_RESERVATION.Flight\_number -> FLIGHT.Flight\_number

SEAT\_RESERVATION.Leg\_number -> FLIGHT\_LEG.Leg\_number

SEAT\_RESERVATION.Date -> LEG\_INSTANCE.Date

1. .

CREATE TABLE AIRPORT (

Airport\_code VARCHAR(20) NOT NULL,

Name CHAR(30) NOT NULL,

City CHAR(30) NOT NULL,

State CHAR(2) NOT NULL

PRIMARY KEY (Airport\_code)

);

CREATE TABLE FLIGHT (

Flight\_number VARCHAR(30) NOT NULL,

Airline CHAR(30) NOT NULL,

Weekdays CHAR(8)

PRIMARY KEY (Flight\_number)

);

CREATE TABLE FLIGHT\_LEG(

Flight\_number VARCHAR(30) NOT NULL,

Leg\_number VARCHAR(30) NOT NULL,

Departure\_airport\_code VARCHAR(30) NOT NULL,

Scheduled\_departure\_time DATETIME,

Arrival\_airport\_code VARCHAR(30) NOT NULL,

Scheduled\_arrival\_time DATETIME,

PRIMARY KEY (Flight\_number, Leg\_number),

FOREIGN KEY (Flight\_number) REFERENCES FLIGHT (Flight\_number)

);

CREATE TABLE LEG\_INSTANCE(

Flight\_number VARCHAR(30) NOT NULL,

Leg\_number VARCHAR(30) NOT NULL,

Date DATE,

Number\_of\_available\_seats INTEGER,

Airplane\_id VARCHAR(30),

Departure\_airport\_code VARCHAR(30) NOT NULL,

Departure\_time DATETIME,

Arrival\_airport\_code VARCHAR(30) NOT NULL,

Arrival\_time DATETIME,

FOREIGN KEY (Flight\_number) REFERENCES FLIGHT (Flight\_number),

FOREIGN KEY (Leg\_number) REFERENCES FLIGHT\_LEG (Leg\_number)

);

CREATE TABLE FARE (

Flight\_number VARCHAR(30) NOT NULL,

Fare\_code VARCHAR(30) NOT NULL,

Amount FLOAT,

Restrictions VARCHAR(30),

PRIMARY KEY (Fare\_code),

FOREIGN KEY (Flight\_number) REFERENCES FLIGHT (Flight\_number)

);

CREATE TABLE AIRPLANE\_TYPE (

Airplane\_type\_name VARCHAR(30) NOT NULL,

Max\_seats INTEGER NOT NULL,

Company VARCHAR(30) NOT NULL

PRIMARY KEY (Airplane\_type\_name)

);

CREATE TABLE CAN\_LAND (

Airplane\_type\_name VARCHAR(30) NOT NULL,

Airport\_code VARCHAR(20) NOT NULL,

FOREIGN KEY (Airplane\_type\_name) REFERENCES AIRPLANE\_TYPE (Airplane\_type\_name),

FOREIGN KEY (Airport\_code) REFERENCES AIRPORT (Airport\_code)

);

CREATE TABLE AIRPLANE (

Airplane\_id VARCHAR(30) NOT NULL,

Total\_number\_of\_seats INTEGER NOT NULL,

Airplane\_type VARCHAR(30) NOT NULL,

PRIMARY KEY (Airplane\_id)

);

CREATE TABLE SEAT\_RESERVATION (

Flight\_number VARCHAR(30) NOT NULL,

Leg\_number VARCHAR(30) NOT NULL,

Date DATE NOT NULL,

Seat\_number VARCHAR(8) NOT NULL,

Customer\_name CHAR(40) NOT NULL,

Customer\_phone INTEGER NOT NULL,

PRIMARY KEY (Date, Seat\_number),

FOREIGN KEY (Flight\_number) REFERENCES FLIGHT (Flight\_number),

FOREIGN KEY (Leg\_number) REFERENCES FLIGHT\_LEG (Leg\_number),

);