**SQL statements:**

CREATE TABLE STATES2\_table

(

stateAbbr VARCHAR(2) PRIMARY KEY ,

stateName VARCHAR(20) NOT NULL ,

);

CREATE TABLE CITY1\_table

(

cityID CHAR(8) PRIMARY KEY ,

cityName VARCHAR(20) NOT NULL ,

stateAbbr VARCHAR(2) FOREIGN KEY(stateAbbr) REFERENCES STATES2\_table(stateAbbr) NOT NULL,

);

CREATE TABLE AIRPORT1\_table

(

airportID CHAR(3) PRIMARY KEY ,

airportName VARCHAR(45) UNIQUE NOT NULL ,

cityID CHAR(8) FOREIGN KEY(cityID) REFERENCES CITY1\_table(cityID) NOT NULL,

);

SELECT \* FROM AIRPORT\_table

CREATE TABLE FLIGHTS\_ROUTE1\_table

(

flightNumber VARCHAR(6) PRIMARY KEY ,

departAirport CHAR(3) FOREIGN KEY(departAirport)REFERENCES AIRPORT1\_table(airportID),

arriveAirport CHAR(3) FOREIGN KEY(arriveAirport)REFERENCES AIRPORT1\_table(airportID),

scheduledDepartTime TIME NOT NULL,

scheduledArrivalTime TIME NOT NULL,

);

CREATE TABLE FLIGHTSTATUS2\_table

(

statusID CHAR(1) PRIMARY KEY NOT NULL,

CONSTRAINT chk3\_statusID CHECK (statusID='O'OR statusID='C' OR statusID='D'),

description VARCHAR(20) NOT NULL,

);

CREATE TABLE AIRCRAFTSPECS1\_table

(

aircraftTypeID CHAR(8) PRIMARY KEY NOT NULL,

aircraftVersion VARCHAR(10) NOT NULL,

cabinNumOfSeats INT,

fuelCapacity INT NOT NULL,

);

CREATE TABLE AIRPLANE1\_table

(

airplaneID CHAR(8) PRIMARY KEY NOT NULL,

aircraftTypeID CHAR(8) FOREIGN KEY(aircraftTypeID) REFERENCES AIRCRAFTSPECS1\_table(aircraftTypeID) NOT NULL,

purchaseDate DATETIME Default '01/02/2014' NOT NULL,

);

CREATE TABLE FLIGHTSCHEDULE112\_table

(

flightNumber VARCHAR(6) NOT NULL,

CONSTRAINT FK1\_FlightNumber foreign key (flightNumber)REFERENCES FLIGHTS\_ROUTE1\_table(flightNumber),

flightDate DATE,

CONSTRAINT PK1\_xyz PRIMARY KEY (flightDate,flightNumber),

statusID CHAR(1) FOREIGN KEY(statusID) REFERENCES FLIGHTSTATUS2\_table(statusID) NOT NULL,

CONSTRAINT ck1\_statusID CHECK (statusID='O'OR statusID='C' OR statusID='D'),

airplaneID CHAR(8) FOREIGN KEY(airplaneID)REFERENCES AIRPLANE1\_table(airplaneID) NOT NULL,

delayDepartTime TIME ,

delayArrivalTime TIME,

);

INSERT INTO STATES2\_table

VALUES

('CA','California'),

('DC','Washington.D.C.'),

('FL','Florida'),

('IL','Illinois'),

('MA','Massachusetts'),

('NY','New York'),

('TX','Texas')

SELECT \* FROM STATES2\_table

INSERT INTO CITY1\_table

VALUES

('C001','Los Angeles','CA'),

('C002','San Francisco','CA'),

('C003','Washington.D.C.','DC'),

('C004','Miami','FL'),

('C005','Orlando','FL'),

('C006','Chicago','IL'),

('C007','Boston','MA'),

('C008','New York','NY'),

('C009','Syracuse','NY')

SELECT \* FROM CITY1\_table

INSERT INTO AIRPORT1\_table

VALUES

('BOS','Darji','C007'),

('DCA','Ronald Reagan National Airport','C003'),

('IAD','Washington Dulles International Airport','C003'),

('JFK','John F. Kennedy International Airport','C008'),

('LAX','Los Angeles International AIrport','C001'),

('LGA','LaGuardia Airport','C008'),

('MCO','Orlando International Airport','C005'),

('MDW','Chicago Midway International Airport','C006'),

('MIA','Miami International Airport','C004'),

('ORD','Chicago O Hare International Airport','C006'),

('SFO','San Francisco International Airport','C002'),

('SYR','Syracuse Hancook International Airport','C009')

SELECT \* FROM AIRPORT1\_table

INSERT INTO FLIGHTS\_ROUTE1\_table

VALUES

(3310,'SYR','JFK','08:00:00.0000000','09:02:00.0000000'),

(3312,'JFK','SYR','12:20:00.0000000','13:30:00.0000000'),

(3426,'LAX','ORD','11:15:00.0000000','15:05:00.0000000'),

(5063,'BOS','MCO','14:30:00.0000000','18:45:00.0000000')

SELECT \* FROM FLIGHTS\_ROUTE1\_table

INSERT INTO FLIGHTSTATUS2\_table

VALUES

('C','Cancelled'),

('D','Delayed'),

('O','On Time')

SELECT \* FROM FLIGHTSTATUS2\_table

INSERT INTO AIRCRAFTSPECS1\_table

VALUES

('AIR1','A321-200',220,7930),

('AIR2','737-600ER',132,6875),

('BOE1','747-400ER',416,63705),

('BOE2','767-300ER',350,23980),

('BOE3','737-600ER',132,6875)

SELECT \* FROM AIRCRAFTSPECS1\_table

INSERT INTO AIRPLANE1\_table

VALUES

('AP098640','AIR2','2013-03-01'),

('AP239471','AIR1','1900-01-01'),

('AP309814','BOE2','2012-05-22'),

('AP629342','BOE1','1900-01-01'),

('AP872139','BOE3','1900-01-01'),

('AP998911','BOE2','1900-01-01')

SELECT \* FROM AIRPLANE1\_table

INSERT INTO FLIGHTSCHEDULE12\_table

VALUES

(3310,'2014-02-10','O','AP629342','',''),

(3310,'2014-02-11','O','AP629342','',''),

(3312,'2014-02-10','O','AP872139','',''),

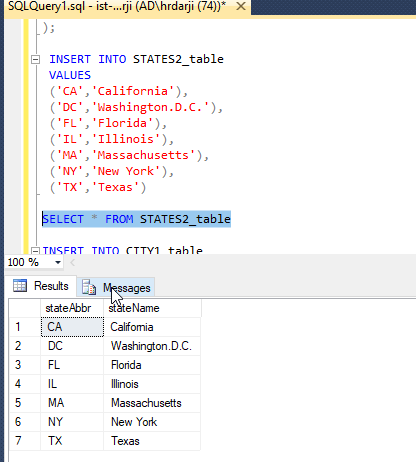
(3426,'2014-02-12','O','AP239471','',''),

(5063,'2014-02-13','D','AP309814','15:40:00.0000000','20:05:00.0000000')

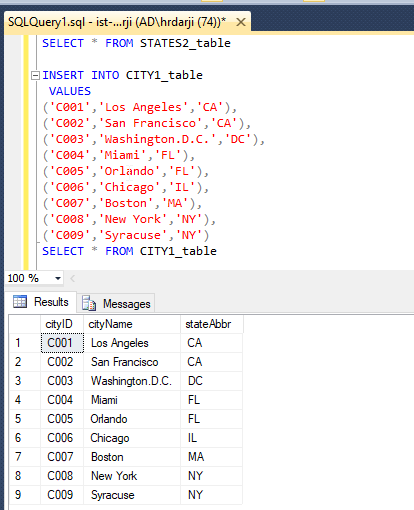
SELECT \* FROM FLIGHTSCHEDULE12\_table

**SQL STATEMENTS AND OUTPUS SCREENSHOTS:**

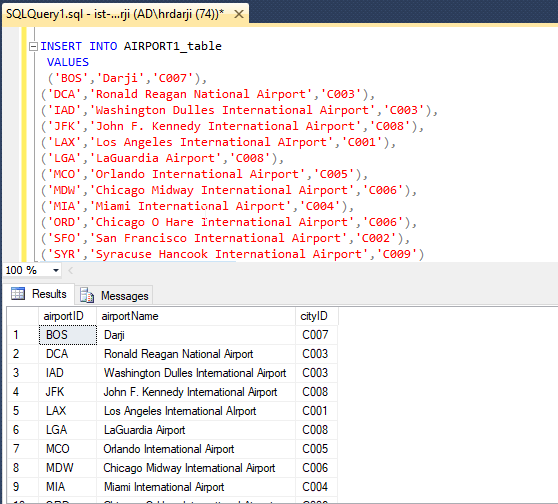
State Table:

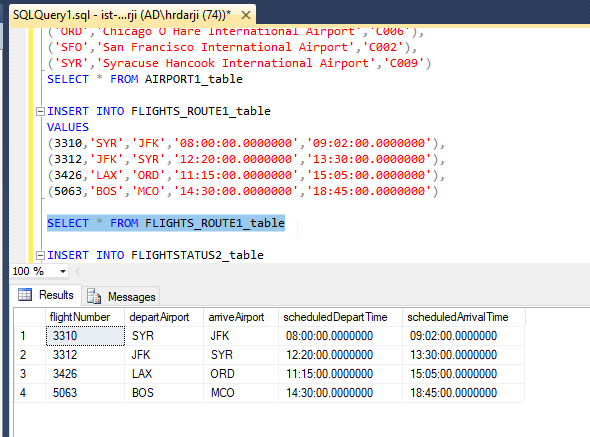
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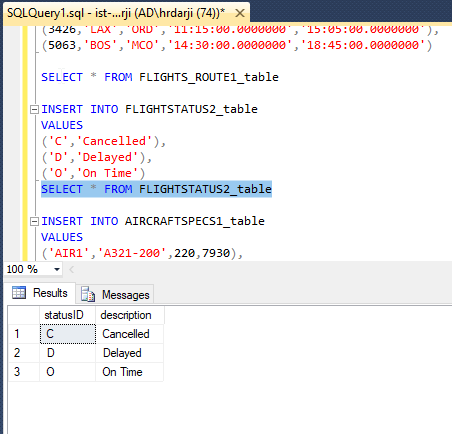
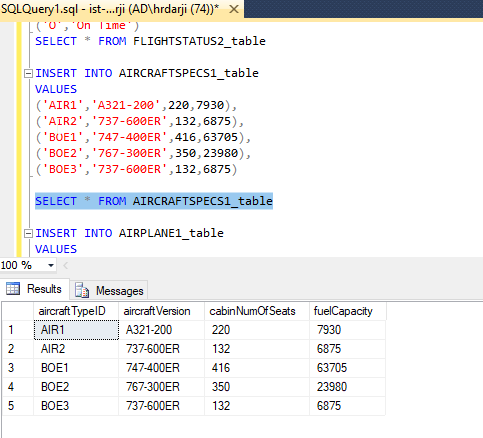
CITY TABLE:

****

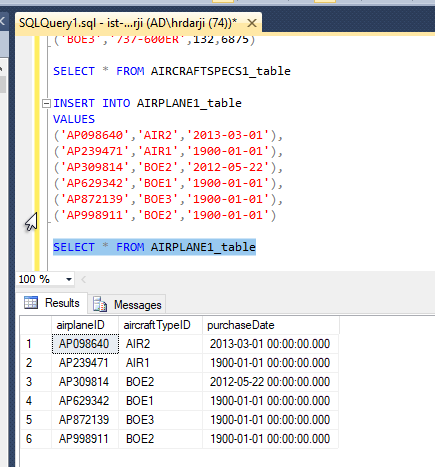
AIRPORT TABLE:

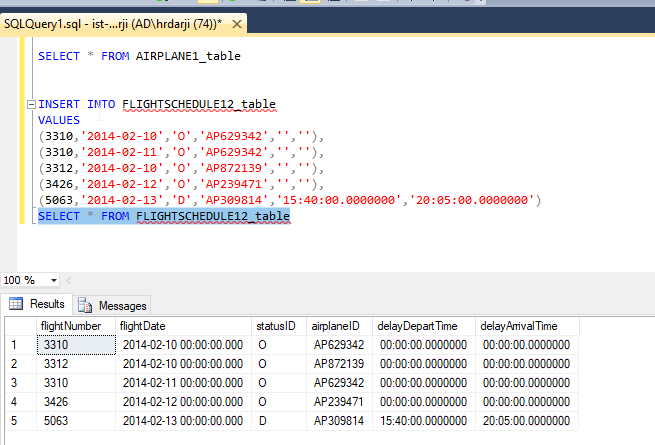
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FLIGHT ROUTE TABLE**:**

FLIGHT STATUS TABLE:AIRCRAFT SPECS TABLE:

AIRPLANE TABLE:



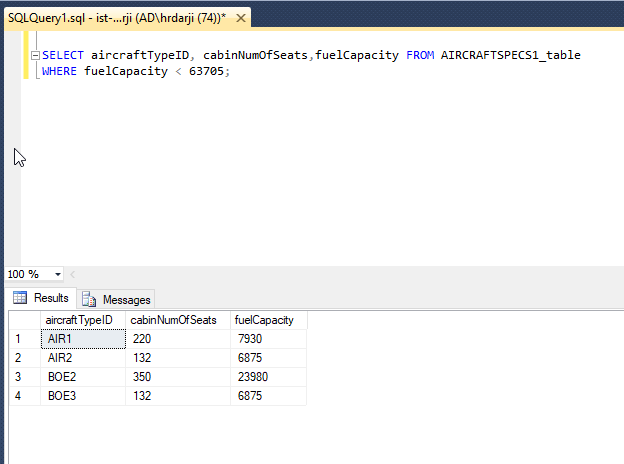
FLIGHT SCHEDULE TABLE:

**QUERIES:**

1.Find all aircrafts whose fuel capacity is less than 63705. Show aircraft id, cabin number of seats and fuel capacity.

-🡪 SELECT aircraftTypeID, cabinNumOfSeats,fuelCapacity FROM AIRCRAFTSPECS1\_table

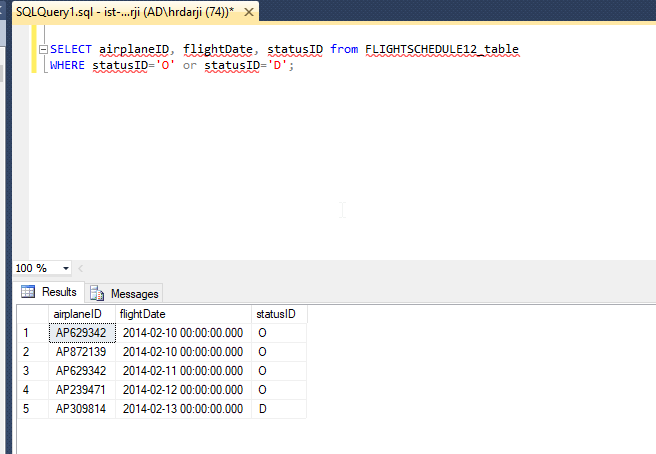
WHERE fuelCapacity < 63705;



2.Find all airplanes which were on time or delayed. Show only airplane ID, flight date and statusID.

🡪 SELECT airplaneID, flightDate, statusID from FLIGHTSCHEDULE12\_table

WHERE statusID='O' or statusID='D';



3.Find all the airplanes that have been purchased before the year 2013-02-10. Show airplane id and the purchase Date.

* SELECT airplaneID, purchaseDate from AIRPLANE1\_table

WHERE purchaseDate<'2013-02-10';

