

--- the following statements drop all sequences and tables so SQL doesn't run into

-- any issues of things already existing -Anusha Mittal, am98968

```
DROP SEQUENCE passenger_id_seq;  
DROP SEQUENCE payment_id_seq;  
DROP SEQUENCE reservation_id_seq;  
DROP SEQUENCE employee_id_seq;  
DROP SEQUENCE flight_id_seq;  
DROP TABLE Pass_Resv_Flight_Linking;  
DROP TABLE Flight;
```

```
DROP TABLE Employee;  
DROP TABLE Reservation;  
DROP TABLE Passenger_Payment;  
DROP TABLE Frequent_Flyer_Profile;  
DROP TABLE Passenger;
```

-- These sequences are created to be later used in create table statements for SQL

-- to automatically go to the next value by adding +1 - Anusha Mittal, am98968

```
CREATE SEQUENCE passenger_id_seq;  
CREATE SEQUENCE payment_id_seq;  
CREATE SEQUENCE reservation_id_seq;  
CREATE SEQUENCE employee_id_seq  
START WITH 100001;
```

```
CREATE SEQUENCE flight_id_seq;
```

-- This creates the passenger table -Anusha Mittal, am98968

```
CREATE TABLE Passenger
```

```
(
```

```
    passenger_id  
    passenger_id_seq.NEXTVAL
```

```
first_name
middle_name
last_name
email
gender      CHAR(1)
country_of_residence
state_of_residence
mailing_address_1
mailing_address_2
mailing_city
mailing_state
mailing_zip
primary_phone
secondary_phone
CONSTRAINT email_length_check CHECK (LENGTH(email)>=7)
```

```
);
```

```
-- This creates the passenger payment table -Anusha Mittal, am98968
```

```
NUMBER(20)
primary key,
```

```
DEFAULT
```

```
NOT NULL,
```

```
VARCHAR(50)
VARCHAR(50),
VARCHAR(50)
VARCHAR(200)
```

```
NOT NULL,
NOT NULL
NOT NULL,
```

```
CHAR(3) NOT NULL,
CHAR(2) NOT NULL,
```

```
VARCHAR(400)
```

VARCHAR(200),
VARCHAR(50)
CHAR(2)
CHAR(5)
CHAR(12)
CHAR(12),

NOT NULL,
NOT NULL,
NOT NULL,
NOT NULL,

UNIQUE,

NOT NULL,

CREATE TABLE Passenger_Payment

(

 payment_id
 payment_id_seq.NEXTVAL

 passenger_id
NOT NULL,

NUMBER(20) DEFAULT
 primary key,

NUMBER(20) REFERENCES Passenger(Passenger_ID)

cardholder_first_name VARCHAR(50)
cardholder_mid_name VARCHAR(50),

NOT NULL,

NOT NULL,
NOT NULL,
NOT NULL,
NOT NULL,

NOT NULL,
NOT NULL,
NOT NULL,
NOT NULL,
NOT NULL

cardholder_last_name
cardtype
cardnumber
expiration_date
cc_id
billing_address
billing_city
billing_state
billing_zip

VARCHAR(50)
VARCHAR(50)
VARCHAR(16)
DATE
VARCHAR(3)
VARCHAR(400)
VARCHAR(200)
CHAR(2)
CHAR(5)

);

-- This creates the reservation table -Anusha Mittal, am98968

CREATE TABLE Reservation

(

 reservation_id NUMBER(20)
reservation_id_seq.NEXTVAL primary key,
 confirmation_number VARCHAR(6)

DEFAULT

NOT NULL UNIQUE,
DEFAULT SYSDATE NOT

NULL,

date_booked

trip_contact_email
trip_contact_phone

DATE

VARCHAR(200)
CHAR(12)

NOT NULL,
NOT NULL

);

-- This creates the employee table -Anusha Mittal, am98968

CREATE TABLE Employee

(

 employee_id
employee_id_seq.NEXTVAL

NUMBER(20)
 primary key,

DEFAULT

NOT NULL,
NOT NULL,
NOT NULL,
NOT NULL
NOT NULL,
NOT NULL,
NOT NULL,

NOT NULL,
NOT NULL

emp_first_name
emp_last_name
emp_birthday
tax_id_number
emp_mailing_address VARCHAR(400)

UNIQUE,

emp_mailing_city
emp_mailing_state
emp_mailing_zip
emp_level

VARCHAR(200)
CHAR(2)
CHAR(5)
CHAR(1)

CHECK(emp_level in ('1','2','3'))
);

-- this creates the flight table -Anusha Mittal, am98968

CREATE TABLE Flight
(

VARCHAR(200)
VARCHAR(200)
DATE
CHAR(9)

flight_id
flight_id_seq.NEXTVAL
flight_number

NUMBER(20)
primary key,

VARCHAR(4)

TIMESTAMP

CHAR(3)

CHAR(3)

NUMBER(20) REFERENCES Employee(employee_id)

);

departure_datetime

departure_city

arrival_city

assigned_employee

NOT NULL,

NOT NULL,

NOT NULL,

NOT NULL,

-- This creates the linking table between passengers, reservations, and flights -Anusha Mittal, am98968

CREATE TABLE Pass_Resv_Flight_Linking

(

passenger_id

Passenger(passenger_id),

reservation_id

Reservation(reservation_id),

);

-- This creates the frequent flyer table -Anusha Mittal, am98968

CREATE TABLE Frequent_Flyer_Profile

(

passenger_id

Passenger(passenger_id),

frequent_flyer_id

ff_password

ff_level

in('B','S','G','P')),

miles_balance

NUMBER(20) primary key REFERENCES

NUMBER(20) REFERENCES

NUMBER(20) REFERENCES

DEFAULT

NUMBER(20) REFERENCES Flight(flight_id),

VARCHAR(3),

VARCHAR(7),

CHAR(1) NOT NULL,

flight_id

seat_assignment

ticket_number

checked_in_flag

boarded_flag

primary key(passenger_id, reservation_id, flight_id)

CHAR(1) NOT NULL,

VARCHAR(7)

VARCHAR(200)

CHAR(1)

NUMBER(10)

NOT NULL

NOT NULL,

NOT NULL

DEFAULT 5000

UNIQUE,
CHECK(ff_level
NOT NULL

);

-- this inserts data into the passenger table -Anusha Mittal, am98968

INSERT INTO Passenger(first_name, middle_name, last_name, email,
gender,
country_of_residence, state_of_residence,
mailing_address_1, mailing_address_2, mailing_city, mailing_state,
mailing_zip, primary_phone, secondary_phone)

VALUES('Anusha', 'M', 'Mittal', 'am98968@utexas.edu', 'F', 'USA', 'TX',
'2100 nueces st', NULL, 'Austin', 'TX',
'77479', '832-992-9464', NULL);

INSERT INTO Passenger(first_name, middle_name, last_name, email,
gender,
country_of_residence, state_of_residence,

mailing_address_1, mailing_address_2, mailing_city, mailing_state,
mailing_zip, primary_phone, secondary_phone)

VALUES('Divisha', 'M', 'Mittal', 'raina@gmail.com', 'F', 'USA', 'TX',
'507 W 23rd St.', NULL, 'Austin', 'TX',

'78705', '832-574-8064', NULL);

COMMIT;

-- this inserts data into the frequent flyer table -Anusha Mittal, am98968

INSERT INTO Frequent_Flyer_Profile (passenger_id, frequent_flyer_id,
ff_password, ff_level)

VALUES(1, '1A2B3C4', 'HookEmHorns123_', 'S');

INSERT INTO Frequent_Flyer_Profile (passenger_id, frequent_flyer_id,
ff_password, ff_level)

VALUES(2, '1A2B3C5', 'Live_Laugh_Love1', 'G');

COMMIT;

-- this inserts data into the passenger payment table -Anusha Mittal, am98968

```
INSERT INTO Passenger_Payment (passenger_id,  
cardholder_first_name,  
cardholder_mid_name, cardholder_last_name,  
cardtype, cardnumber, expiration_date, cc_id, billing_address,  
billing_city, billing_state, billing_zip)
```

```
VALUES (1,Anusha, 'M', 'Mittal', 'Visa', '1234456718720446',  
TO_DATE('07/25', 'MM/YY'),  
'123','2100 nueces st', 'Austin', 'TX', '77479');
```

```
INSERT INTO Passenger_Payment (passenger_id,  
cardholder_first_name,  
cardholder_mid_name, cardholder_last_name,
```

```
cardtype, cardnumber, expiration_date, cc_id, billing_address,  
billing_city, billing_state, billing_zip)
```

```
VALUES (1,'Anusha', 'M', 'Mittal', 'American Express',  
'5867923048567239', TO_DATE('04/27', 'MM/YY'),
```

```
'987','577 Love Lane', 'Austin', 'TX', '78705');
```

```
INSERT INTO Passenger_Payment (passenger_id,  
cardholder_first_name,  
cardholder_mid_name, cardholder_last_name,  
cardtype, cardnumber, expiration_date, cc_id, billing_address,  
billing_city, billing_state, billing_zip)
```

```
VALUES (2,'Divisha', 'M', 'Mittal', 'American Express',  
'3984765823546712', TO_DATE('10/26', 'MM/YY'),  
'456','507 W 23rd St.', 'Austin', 'TX', '78705');
```

COMMIT;

-- this inserts data into the employee table -Anusha Mittal, am98968

```
INSERT INTO Employee (emp_first_name, emp_last_name,  
emp_birthday,  
tax_id_number,  
emp_mailing_address, emp_mailing_city, emp_mailing_state,
```

emp_mailing_zip,
emp_level)

VALUES('Sneha', 'Joseph', TO_DATE('06/10/2000', 'MM/DD/YYYY'),
'827374892', '5647 Cutie Boulevard', 'San Antonio', 'TX', '78705', '1');
INSERT INTO Employee (emp_first_name, emp_last_name,
emp_birthday,
tax_id_number,
emp_mailing_address, emp_mailing_city, emp_mailing_state,
emp_mailing_zip,
emp_level)
VALUES('Coby', 'Kuruvilla', TO_DATE('05/16/1990', 'MM/DD/YYYY'),
'718293847', '500 Wellborn Road', 'El Paso', 'TX', '73509', '2');

INSERT INTO Employee (emp_first_name, emp_last_name,
emp_birthday,
tax_id_number,
emp_mailing_address, emp_mailing_city, emp_mailing_state,
emp_mailing_zip,
emp_level)

VALUES('Tanya', 'Kaladindi', TO_DATE('02/22/1989', 'MM/DD/YYYY'),
'192837465', '234 Stupid Street', 'El Paso', 'TX', '77670', '3');
INSERT INTO Employee (emp_first_name, emp_last_name,
emp_birthday,
tax_id_number,

emp_mailing_address, emp_mailing_city, emp_mailing_state,
emp_mailing_zip,
emp_level)

VALUES('Greeshma', 'Biju', TO_DATE('04/06/1979', 'MM/DD/YYYY'),
'554672837', '6745 Gross Jester', 'San Antonio', 'TX', '70987', '1');
INSERT INTO Employee (emp_first_name, emp_last_name,
emp_birthday,
tax_id_number,

emp_mailing_address, emp_mailing_city, emp_mailing_state,
emp_mailing_zip,
emp_level)

```
VALUES('Samyuktha', 'Prabu', TO_DATE('01/15/1999', 'MM/DD/YYYY'),  
'093746578', '458 Cool Curb', 'San Diego', 'IN', '12345', '2');
```

```
INSERT INTO Employee (emp_first_name, emp_last_name,  
emp_birthday,  
tax_id_number,  
emp_mailing_address, emp_mailing_city, emp_mailing_state,  
emp_mailing_zip,  
emp_level)
```

```
VALUES('Disha', 'Santhanam', TO_DATE('05/06/1954', 'MM/DD/YYYY'),  
'102936746', '546 Cougar Lane', 'San Diego', 'TX', '74567', '3');
```

-- this inserts data into the flight table -Anusha Mittal, am98968

```
INSERT INTO Flight (flight_number, departure_datetime, departure_city,  
arrival_city, assigned_employee)  
VALUES ('231', '01-JUN-2024 08:00:00 AM', 'SAT', 'ELP', 100001);  
INSERT INTO Flight (flight_number, departure_datetime, departure_city,  
arrival_city, assigned_employee)
```

```
VALUES ('232', '01-JUN-2024 11:00:00 AM', 'ELP', 'SAN', 100002);  
INSERT INTO Flight (flight_number, departure_datetime, departure_city,  
arrival_city, assigned_employee)  
VALUES ('451', '01-JUN-2024 03:00:00 PM', 'SAN', 'ELP', 100005);  
INSERT INTO Flight (flight_number, departure_datetime, departure_city,  
arrival_city, assigned_employee)  
VALUES ('452', '01-JUN-2024 05:00:00 PM', 'ELP', 'SAT', 100002);  
INSERT INTO Flight (flight_number, departure_datetime, departure_city,  
arrival_city, assigned_employee)  
VALUES ('231', '02-JUN-2024 08:00:00 AM', 'SAT', 'ELP', 100004);  
INSERT INTO Flight (flight_number, departure_datetime, departure_city,  
arrival_city, assigned_employee)  
VALUES ('232', '02-JUN-2024 11:00:00 AM', 'ELP', 'SAN', 100003);  
INSERT INTO Flight (flight_number, departure_datetime, departure_city,  
arrival_city, assigned_employee)  
VALUES ('451', '02-JUN-2024 03:00:00 PM', 'SAN', 'ELP', 100006);  
INSERT INTO Flight (flight_number, departure_datetime, departure_city,  
arrival_city, assigned_employee)
```

```
VALUES ('452', '02-JUN-2024 05:00:00 PM', 'ELP', 'SAT', 100003);  
COMMIT;
```

-- this inserts data into the reservation table -Anusha Mittal, am98968

```
INSERT INTO Reservation (confirmation_number, trip_contact_email,  
trip_contact_phone)  
VALUES('1A2B3C', 'divishamittal@hotmail.com', '832-545-7274');  
COMMIT;
```

-- this inserts data into the linking table between passengers,
reservations, and flights -Anusha Mittal, am98968

```
INSERT INTO Pass_Resv_Flight_Linking (passenger_id, reservation_id,  
flight_id, seat_assignment,  
ticket_number, checked_in_flag, boarded_flag)  
VALUES (1, 1, 1, '1A', '1209020','N', 'N');
```

```
INSERT INTO Pass_Resv_Flight_Linking (passenger_id, reservation_id,  
flight_id, seat_assignment,  
ticket_number, checked_in_flag, boarded_flag)  
VALUES (1, 1, 2, '1A', '1209020','N', 'N');
```

```
INSERT INTO Pass_Resv_Flight_Linking (passenger_id, reservation_id,  
flight_id, seat_assignment,  
ticket_number, checked_in_flag, boarded_flag)  
VALUES (1, 1, 7, '1A', '1209020','N', 'N');
```

```
INSERT INTO Pass_Resv_Flight_Linking (passenger_id, reservation_id,  
flight_id, seat_assignment,  
ticket_number, checked_in_flag, boarded_flag)  
VALUES (1, 1, 8, '1A', '1209020','N', 'N');
```

```
INSERT INTO Pass_Resv_Flight_Linking (passenger_id, reservation_id,  
flight_id, seat_assignment,  
ticket_number, checked_in_flag, boarded_flag)  
VALUES (2, 1, 1, '1B', '1209021','N', 'N');
```

```
INSERT INTO Pass_Resv_Flight_Linking (passenger_id, reservation_id,  
flight_id, seat_assignment,
```

```
ticket_number, checked_in_flag, boarded_flag)
VALUES (2, 1, 2, '1B', '1209021','N', 'N');
```

```
INSERT INTO Pass_Resv_Flight_Linking (passenger_id, reservation_id,
flight_id, seat_assignment,
ticket_number, checked_in_flag, boarded_flag)
VALUES (2, 1, 7, '1B', '1209021','N', 'N');
```

```
INSERT INTO Pass_Resv_Flight_Linking (passenger_id, reservation_id,
flight_id, seat_assignment,
ticket_number, checked_in_flag, boarded_flag)
VALUES (2, 1, 8, '1B', '1209021','N', 'N');
```

```
COMMIT;
```

--the first 2 indexes are on the 2 foreign keys that are not also a primary key (passenger id and assigned employee)

--the last 2 indexes are on the cardnumber and emp first name because
|

believe those would be frequently searched on

-- Anusha Mittal, am98968

```
CREATE INDEX passenger_payment_passenger_id_ix ON
Passenger_Payment(passenger_id);
CREATE INDEX flight_assigned_employee_ix ON
Flight(assigned_employee);
CREATE INDEX passenger_payment_cardnumber_ix ON
Passenger_Payment(cardnumber);
CREATE INDEX employee_emp_first_name_ix ON
Employee(emp_first_name);
```