-- Customer Table

Create Custinfo:

create table custinfo (

fullname varchar2(15),

address varchar2(15),

city varchar2(15),

state varchar2(2),

telephone varchar2 (10),

custid number(2),

constraint custinfo\_pk primary key (custid));

--­ Flights Table

create table flights (

flightid number(5),

flightfrom varchar2(15),

flightto varchar2(15),

fare number (3),

flightdate varchar2(11),

seatsleft number(2),

constraint flights\_pk primary key (flightid));

-- Payment Table

create table payment (

fullname varchar2(15),

credit number(16),

ssc number(3),

paymentid number(10),

constraint payment\_pk primary key (paymentid));

-- Reservation Table

create table reservation (

fullname varchar2(15),

departdate varchar2(11),

paymentid number(10),

flightid number(5),

resid number(5),

constraint reservation\_pk primary key (resid),

constraint fk\_custinfo foreign key (custid) REFERENCES custinfo(custid),

constraint fk\_flights foreign key (flightid) REFERENCES flights(flightid),

constraint fk\_payment foreign key (paymentid) REFERENCES payment(paymentid));

--Insert values in Custinfo:

insert into custinfo (fullname, address, city, state, telephone, custid) values ( 'Amy Johns', '123 Austin St', 'Forest Hills', 'NY','7183230101',01);

insert into custinfo (fullname, address, city, state, telephone, custid) values ( 'Greg Manning', '44 Main St', 'Flushing', 'NY','9172518200',02);

--Insert into Flights:

insert into flights (flightid, flightfrom, flightto, fare, flightdate, seatsleft) values (11111, 'JFK', 'Chicago',300, '10-MAY-2018',10);

insert into flights ( flightid, flightfrom, flightto, fare, flightdate, seatsleft) values (22222, 'JFK', 'Chicago',400, '10-MAY-2018',40);

insert into flights ( flightid, flightfrom, flightto, fare, flightdate, seatsleft) values (33333, 'JFK', 'Chicago',200, '10-MAY-2018',2);

insert into flights ( flightid, flightfrom, flightto, fare, flightdate, seatsleft) values (44444, 'JFK', 'Chicago',100, '10-MAY-2018',56);

--Insert into Payment:

insert into payment (fullname, credit, ssc, paymentid) values ( 'Amy Johns', 1234567890123456, 098, 1234567890);

insert into payment (fullname, credit, ssc, paymentid) values ( 'Greg Manning', 2042316987530985, 123, 1234567891);

--Insert into Reservation:

insert into reservation (fullname, departdate, paymentid, flightid, resid) values ( 'Amy Johns', '10-MAY-2018', 1234567890, 11111,00001);

insert into reservation (fullname, departdate, paymentid, flightid, resid) values ( 'Greg Manning', '10-MAY-2018', 1234567891, 22222,00002);

Procedures:

-- customer registers and is given an id number

create sequence cust\_counter

start with 3

increment by 1;

set serveroutput on

create or replace procedure registerCust(v\_fullname custinfo.fullname%type,

v\_address custinfo.address%type,

v\_city custinfo.city%type,

v\_state custinfo.state%type,

v\_telephone custinfo.telephone%type)

is

begin

insert into custinfo values (v\_fullname, v\_address, v\_city, v\_state, v\_telephone, cust\_counter.NEXTVAL);

dbms\_output.put\_line ( ' The new customer has been successfully registered, and their Customer ID is: ' || cust\_counter.CURRVAL);

end;

execute registerCust('&Enter\_name', '&Enter\_address', '&Enter\_city', '&Enter\_state', '&Enter\_telephone\_number');

--#2 customer search for a flight by giving the source, destination and date

set serveroutput on

create or replace procedure searchFlight(v\_flightfrom flights.flightfrom%type, v\_flightto flights.flightto%type, v\_flightdate flights.flightdate%type)

is

v\_flightid flights.flightid%type;

v\_fare flights.fare%type;

v\_seatsleft flights.seatsleft%type;

cursor find\_flight is select flightfrom, flightto, flightdate, from flights where flightid = v\_flightid;

begin

open find\_flight;

loop

fetch find\_flight into v\_flightfrom, v\_flightto, v\_flightdate;

exit when find\_flight%NOTFOUND;

dbms\_output.put\_line ( 'Flight ID: ' || v\_flightid || ' ' || 'Source: ' || v\_flightto || ' ' || 'Destination: ' || v\_flightto || ' ' || 'Date: ' || v\_flightdate);

end loop;

close find\_flight;

end;

execute searchFlight('JFK', ‘Chicago’, ‘10-MAY-2018’);

--#3 customer makes a reservation by giving the number of passengers, and the flight number

set serveroutput on

create sequence resid\_seq

start with 2

increment by 1;

create or replace procedure makeRes(v\_flightid in reservation.flightid%type, v\_seatsleft in flights.seatsleft%type, v\_custid in reservation.custid%type)

is

begin

insert into reservation values (v\_flightid, resid\_seq.NEXTVAL,v\_seatsleft, v\_custid);

dbms\_output.put\_line ('Reservation successful');

dbms\_output.put\_line ('Flight ID: ' || v\_flightid);

dbms\_output.put\_line ('Number of Seats: ' || v\_seatsleft);

dbms\_output.put\_line ('Customer ID: ' || v\_custid);

end;

execute makeRes(33333,1,3);

--#4 customer can view all of their reservations by entering their ID

set serveroutput on

create or replace procedure viewRes(v\_custid reservation.custid%type)

is

v\_resid reservation.resid%type;

v\_flightid reservation.flightid%type;

v\_seatsleft reservation.seatsleft%type;

cursor view\_Res is select resid, flightid,seatsleft from reservation where custid = v\_custid;

begin

open view\_Res;

loop

fetch view\_Res into v\_resid, v\_flightid, v\_seatsleft;

exit when view\_Res%NOTFOUND;

dbms\_output.put\_line ( 'Reservation ID: ' || v\_resid || ' ' || 'FlightID: ' || v\_flightid || ' ' || 'Seats Reserved: ' || v\_seatsleft);

end loop;

close view\_Res;

end;

execute viewRes(2);

-- view all flight details from a location

set serveroutput on

create or replace procedure adminFlight(v\_flightfrom flights.flightfrom%type)

is

v\_flightid flights.flightid%type;

v\_flightto flights.flightto%type;

v\_fare flights.fare%type;

v\_flightdate flights.flightdate%type;

v\_seatsleft flights.seatsleft%type;

cursor find\_flight is select flightid, flightto, fare, flightdate, seatsleft from flights where flightfrom = v\_flightfrom;

begin

open find\_flight;

loop

fetch find\_flight into v\_flightid, v\_flightto, v\_fare, v\_flightdate, v\_seatsleft;

exit when find\_flight%NOTFOUND;

dbms\_output.put\_line ( 'Flight ID: ' || v\_flightid || ' ' || 'Destination: ' || v\_flightto || ' ' || 'Price: $' || v\_fare || ' ' || 'Date: ' || v\_flightdate || ' ' || 'Seats Remaining: ' || v\_seatsleft);

end loop;

close find\_flight;

end;

execute adminFlight('JFK');

-- change the fare of any flight (based on Flight ID)

set serveroutput on

create or replace procedure updateFare (v\_fare in flights.fare%type, v\_flightid flights.flightid%type)

is

begin

update flights

set fare = v\_fare

where flightid = v\_flightid;

end;

execute updateFare (999, 11111);

-- see all the reservations on a given flight

set serveroutput on

create or replace procedure findRes (v\_flightid custinfo.custid%type)

is

v\_fullname reservation.fullname%type;

v\_departdate reservation.departdate%type;

v\_paymentid reservation.paymentid%type;

v\_resid reservation.resid%type;

cursor Resinfo is select fullname, departdate, paymentid, resid from reservation where flightid = v\_flightid;

begin

open Resinfo;

loop

fetch Resinfo into v\_fullname, v\_departdate, v\_paymentid, v\_resid;

exit when Resinfo%NOTFOUND;

dbms\_output.put\_line(v\_fullname);

dbms\_output.put\_line(v\_departdate);

dbms\_output.put\_line(v\_paymentid);

dbms\_output.put\_line(v\_resid);

end loop;

close Resinfo;

end;

execute findRes (22222);

-- view any customer details (given the ID of the customer)set serveroutput on

create or replace procedure findCust (v\_custid custinfo.custid%type)

is

v\_fullname custinfo.fullname%type;

v\_address custinfo.address%type;

v\_city custinfo.city%type;

v\_state custinfo.state%type;

v\_telephone custinfo.telephone%type;

cursor find\_cust is select fullname, address, city, state, telephone from custinfo where custid = v\_custid;

begin

open find\_cust;

loop

fetch find\_cust into v\_fullname, v\_address, v\_city, v\_state, v\_telephone;

exit when find\_cust%NOTFOUND;

dbms\_output.put\_line(v\_fullname);

dbms\_output.put\_line(v\_address);

dbms\_output.put\_line(v\_city);

dbms\_output.put\_line(v\_state);

dbms\_output.put\_line(v\_telephone);

end loop;

close find\_cust;

end;

-- Add a new flight

set serveroutput on

create or replace procedure addFlight(

v\_flightid flights.flightid%type,

v\_flightfrom flights.flightfrom%type,

v\_flightto flights.flightto%type,

v\_fare flights.fare%type,

v\_flightdate flights.flightdate%type,

v\_seatsleft flights.seatsleft%type)

is

begin

INSERT INTO FLIGHTS (flightid, flightfrom, flightto, fare, flightdate, seatsleft) VALUES(v\_flightid, v\_flightfrom,v\_flightto,v\_fare, v\_flightdate,v\_seatsleft);

dbms\_output.put\_line('New flight has been added');

dbms\_output.put\_line('FLIGHT ID: '||v\_flightid||' FROM: '||v\_flightfrom||' DESTINATION: '||v\_flightto||

' DATE: '||v\_flightdate||' FARE: $'|| v\_fare||' AVAILABE SEATS: '||v\_seatsleft);

end;

EXECUTE addFlight(55555, 'JFK', 'San Diego', 700, '31-DEC-18', 25);