

IS 410 Deliverable 3

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SQL Command

```
drop table Weather;  
drop table Passenger;  
drop table Crew;  
drop table Dispatcher;  
drop table Airport;  
drop table Flight;  
drop table Employee;
```

--Employee--

```
create table Employee (  
    Eid int,  
    Ename varchar(30),  
    Etype varchar(30),  
    primary key (Eid));
```

```
desc Employee;  
insert into Employee values (1, 'John', 'Dispatcher');  
insert into Employee values (2, 'David', 'Crew');  
insert into Employee values (3, 'Tiffany', 'Crew');  
select * from Employee;
```

--Flight--

```
create table Flight (  
    Flight_number int,  
    Plane_num int,  
    Plane_type varchar(30),  
    primary key (Flight_number));
```

```
desc Flight;  
insert into Flight values (7, 1, 'Boeing 747');  
insert into Flight values (8, 2, 'Boeing 737');  
select * from Flight;
```

--Airport--

```
Create table Airport (  
  Airport_ID int,  
  Flight_number int,  
  Airport_name varchar (30),  
  Arrival_time timestamp,  
  Departure_time timestamp,  
  Primary key (Airport_ID),  
  Foreign key (Flight_number) references Flight (Flight_number));
```

```
desc Airport;
```

```
insert into Airport values (11, 7, 'BWI', timestamp '2017-06-22 09:45:00', timestamp '2017-06-20 05:30:00');
```

```
insert into Airport values (22, 8, 'Philadelphia International', timestamp '2017-08-24 14:30:00', timestamp '2017-08-14 11:30:00');
```

```
insert into Airport values (31, 7, 'JFK', timestamp '2017-06-21 15:00:00', timestamp '2017-06-19 10:00:00');
```

```
insert into Airport values (41, 8, 'Richmond International', timestamp '2017-08-20 13:00:00', timestamp '2017-08-12 17:00:00');
```

```
select * from Airport;
```

--Dispatcher--

```
create table Dispatcher (  
  Flight_Number int,  
  Airport_ID int,  
  Emergency_landing varchar (50),  
  foreign key (Flight_number) references Flight (Flight_number),  
  foreign key (Airport_ID) references Airport(Airport_ID));
```

```
desc Dispatcher;
```

```
insert into Dispatcher values (7, 11, 'Interstate 295 Paulsboro New Jersey');
```

```
insert into Dispatcher values(8, 22, 'Dulles International Airport Virginia');
```

```
select * from Dispatcher;
```

--Crew--

```
create table Crew (  
  Flight_number int,  
  primary key (Flight_number),  
  foreign key (Flight_number) references Flight (Flight_number));
```

```
desc Crew;
```

```
Insert into Crew values (7);
```

```
Insert into Crew values (8);
select * from Crew;
```

--Passenger--

```
create table Passenger (
  Passid int,
  Passname varchar (30),
  Flight_number int,      --Foreign key of passenger
  PassTick int,
  PassSeat int,
  Zipcode int,
  City varchar(30),
  Street varchar(30),
  State varchar (30),
  primary key (Passid),
  foreign key (Flight_number) references Flight (Flight_number));
```

```
desc Passenger;
insert into Passenger values (10, 'Joe', 8, 584, 23, 21218, 'University Avn', 'Baltimore', 'MD');
insert into Passenger values (11, 'Lily', 7, 869, 24, 21219, 'Lincoln Str', 'Los Angeles', 'CA');
insert into Passenger values (12, 'Nicole', 7, 752, 25, 21220, 'Raymond Rd', 'Houston', 'TX');
insert into Passenger values (13, 'Brian', 8, 113, 26, 21221, 'Diwa Blvd', 'New York', 'NY');
select * from Passenger;
```

--Weather--

```
Create table Weather (
  Weather_condition varchar(30),
  Airport_ID int, --foreign key of Airport
  primary key (Weather_condition),
  foreign key(Airport_ID) references Airport (Airport_ID));
```

```
desc Weather;
Insert into Weather values('sunny', 22);
select * from Weather;
```

```
Select Airport_name from Airport
Where Flight_number = (select max(Flight_number) from Airport);
```

```
Select passname from passenger
Where passtick = (select max(passtick) from passenger);
```

Group By:

```
Select airport_id  
from airport  
group by airport_id;
```

```
Select passid  
from passenger  
group by passid;
```

4 Join:**-- Natural join (Plane_type and Airport Name)**

```
Select Plane_type, Airport_name  
From Flight, Airport  
Where Flight.Flight_number = Airport.Flight_number
```

-- Outer Join (Ename and Plane_Type)

```
Select ename, plane_type  
From employee, flight  
Where employee.eid = flight.flight_number (+);
```

--Join + Aggregation (Count the Flight number associated with Boeing 747 in the Airports)

```
Select count(*)  
From passenger, flight  
Where passenger.flight_number = flight.flight_number  
And plane_type = 'Boeing 747';
```

-- Multi join (Passname, Plane_Type, Airport_Name)

```
Select passname, plane_type, airport_name  
From passenger, flight, airport  
Where passenger.flight_number = flight.flight_number  
And flight.flight_number = airport.flight_number;
```

2 Update Queries:

```
Update Passenger  
Set PassSeat = PassSeat - 5  
Where Passname = 'Lily';
```

```
Update Passenger  
Set PassSeat = PassSeat + 17  
Where Passname = 'Joe';
```