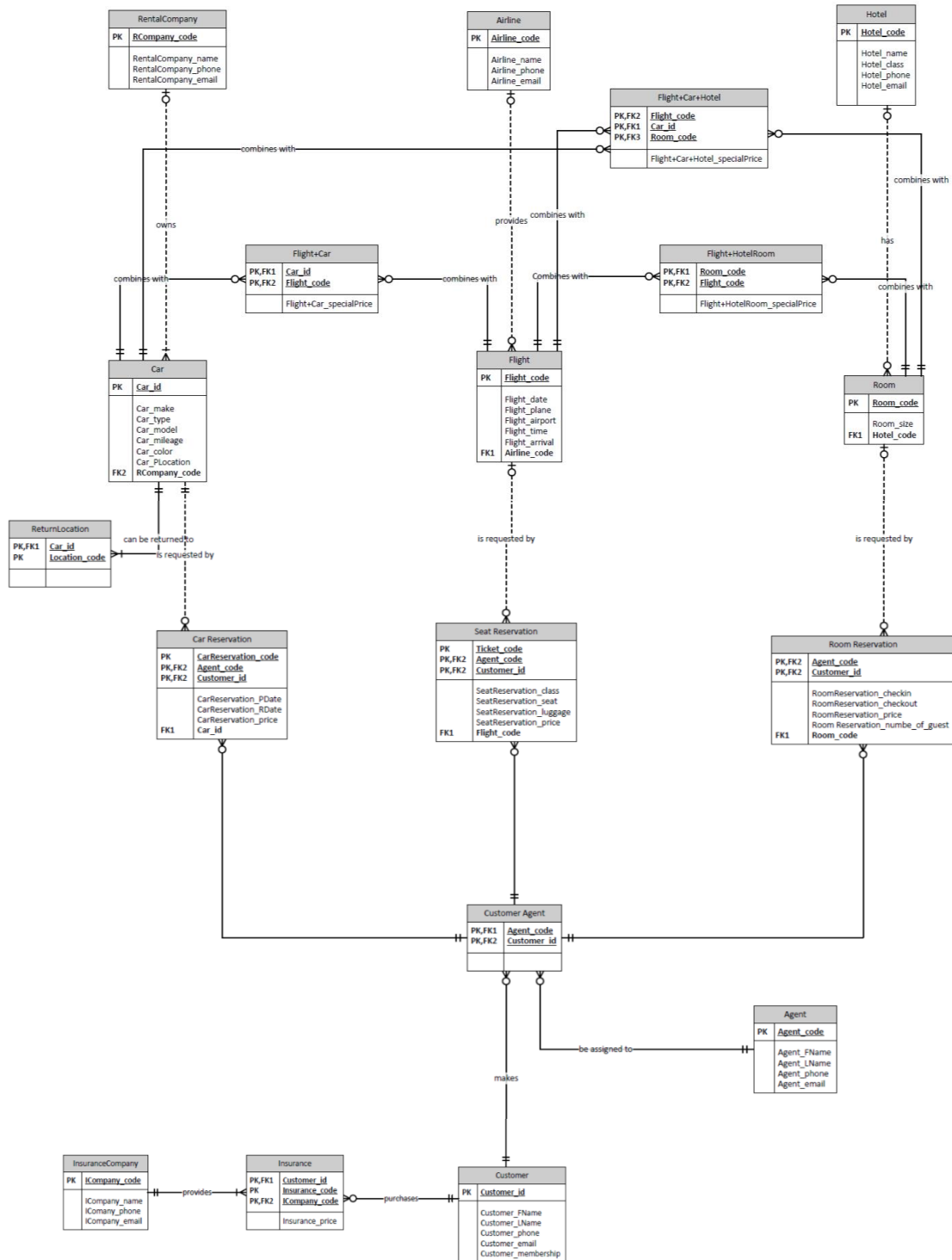


ERD



Database Creation

```
create database Travel
go
use Travel
go
/*Customer*/
create table Customer
(
Customer_id int identity(1000,10) not null,
Customer_fname varchar(30) not null,
Customer_lname varchar(20) not null,
Customer_phone varchar(13),
Customer_email varchar(40),
Customer_membership varchar(10)
constraint PK_Cus primary key (Customer_id)
)

/*Agent*/
create table Agent
(
Agent_code int identity(200,1) not null,
Agent_fname varchar(30) not null,
Agent_lname varchar(20) not null,
Agent_phone varchar(13),
Agent_email varchar(40)
constraint PK_Agt primary key (Agent_code)
)

/*Customer Agent*/
create table CusAgent
(
Customer_id int,
Agent_code int
constraint FK_Cus
foreign key (Customer_id) references Customer(Customer_id),
constraint FK_Agt
foreign key (Agent_code) references Agent(Agent_code),
constraint PK_CusAgt
primary key clustered (Customer_id, Agent_code)
)

/*Airline*/
create table Airline
(
Airline_code char(3) not null
CHECK (Airline_code like '[A-Z][A-Z][A-Z]'),
Airline_name varchar(20),
Airline_phone varchar(13),
Airline_email varchar(40)
constraint PK_Air primary key (Airline_code)
)

/*Flight*/
create table Flight
(
```

```

Flight_code char(5) not null
        CHECK (Flight_code like '[A-Z][A-Z][0-9][0-9][0-9]'),
Flight_date datetime ,
Flight_plane varchar(10) not null,
Flight_airport varchar(10),
Flight_time datetime,
Flight_arrival varchar(10),
Airline_code char(3)
constraint FK_Flight
foreign key (Airline_code) references Airline(Airline_code)
constraint PK_Fli_Code primary key (Flight_code)
)

/*Rental company*/
create table RentalCompany
(
RentalCompany_code int identity(500,20) not null,
RentalCompany_name varchar(20),
RentalCompany_phone varchar(13),
RentalCompany_email varchar(40)
constraint PK_Rental primary key (RentalCompany_code)
)

/*Car*/
create table Car
(
Car_id int identity(3000,10) not null,
Car_make varchar(20),
Car_type varchar(20),
Car_model varchar(20),
Car_mileage int,
Car_color varchar(20),
Car_PLocation varchar(20),
RentalCompany_code int
constraint FK_Car
foreign key (RentalCompany_code) references RentalCompany(RentalCompany_code)
constraint PK_Car
primary key (Car_id)
)

/*Seat reservation*/
create table SeatReservation
(
Ticket_code int identity(3000,10) not null,
SeatReservation_class varchar(10),
SeatReservation_seat varchar(10),
SeatReservation_luggage int,
SeatReservation_price money default '$0',
Flight_code char(5),
Agent_code int,
Customer_id int
constraint FK_SeatRes
foreign key (Flight_code) references Flight(Flight_code),
foreign key (Agent_code) references Agent(Agent_code),
foreign key (Customer_id) references Customer(Customer_id),
primary key clustered (Ticket_code, Customer_id, Agent_code)
)

```

```

/*Car reservation*/
create table CarReservation
(
CarReservation_code int identity(300,10) not null,
CarReservation_PDate datetime not null,
CarReservation_RDate datetime,
CarReservation_price money default '$0',
Car_id int,
Agent_code int,
Customer_id int
constraint FK_CarRes
foreign key (Car_id) references Car(Car_id),
foreign key (Agent_code) references Agent(Agent_code),
foreign key (Customer_id) references Customer(Customer_id),
primary key clustered (CarReservation_code,Customer_id, Agent_code)
)
go

```

Mock Data

```
/*Customer data*/
insert into Customer ( Customer_fname , Customer_lname, Customer_phone ,
Customer_email, Customer_membership )
values ('Jeff', 'Clowser', '(236)992-0610', 'jclowser0@smugmug.com', null);
insert into Customer ( Customer_fname , Customer_lname, Customer_phone ,
Customer_email, Customer_membership )
values ('Carol', 'Marwood', '(778)645-5945', 'cmarwood1@netvibes.com', null);
insert into Customer ( Customer_fname , Customer_lname, Customer_phone ,
Customer_email, Customer_membership )
values ('Amata', 'Moss', '(778)123-0176', 'amoss2@360.cn', 'Member');
insert into Customer ( Customer_fname , Customer_lname, Customer_phone ,
Customer_email, Customer_membership )
values ('Yoshi', 'Paulitschke', '(778)938-3879', 'ypaulitschke3@hexun.com', 'Member');
insert into Customer ( Customer_fname , Customer_lname, Customer_phone ,
Customer_email, Customer_membership )
values ('Esmaria', 'Boik', '(236)646-4452', 'eboik4@amazonaws.com', 'Member');
insert into Customer ( Customer_fname , Customer_lname, Customer_phone ,
Customer_email, Customer_membership )
values ('Harbert', 'Pittford', '(778)756-4153', 'hpittford5@amazon.com', 'Member');
insert into Customer ( Customer_fname , Customer_lname, Customer_phone ,
Customer_email, Customer_membership )
values ('Thadeus', 'Le Marchant', '(778)360-0649', 'tleMarchant6@cnn.com', null);
insert into Customer ( Customer_fname , Customer_lname, Customer_phone ,
Customer_email, Customer_membership )
values ('Celinda', 'Sissel', '(236)277-5630', 'csissel7@comsenz.com', null);
insert into Customer ( Customer_fname , Customer_lname, Customer_phone ,
Customer_email, Customer_membership )
values ('Gwendolin', 'Mallabon', '(236)391-6214', 'gmallabon8@netscape.com', null);
insert into Customer ( Customer_fname , Customer_lname, Customer_phone ,
Customer_email, Customer_membership )
values ('Nicko', 'Castells', '(778)836-9017', 'ncastells9@feedburner.com', null);

/*Agent data*/
insert into Agent (Agent_fname, Agent_lname, Agent_phone, Agent_email)
values ('Skipper', 'Matejka', '(778)709-0201', 'smatejka0@phpbb.com');
insert into Agent (Agent_fname, Agent_lname, Agent_phone, Agent_email)
values ('Moselle', 'Borton', '(778)459-7202', 'mborton1@google.fr');
insert into Agent (Agent_fname, Agent_lname, Agent_phone, Agent_email)
values ('Fayina', 'Portam', '(778)357-7897', 'fportam2@github.io');
insert into Agent (Agent_fname, Agent_lname, Agent_phone, Agent_email)
values ('Tuckie', 'Spurdle', '(778)563-2810', 'tspurdle3@bluehost.com');
insert into Agent (Agent_fname, Agent_lname, Agent_phone, Agent_email)
values ('Reina', 'Mackney', '(778)656-3211', 'rmackney4@bandcamp.com');
insert into Agent (Agent_fname, Agent_lname, Agent_phone, Agent_email)
values ('Hewett', 'Beamand', '(778)179-3722', 'hbeamand5@mapy.cz');
insert into Agent (Agent_fname, Agent_lname, Agent_phone, Agent_email)
values ('Edie', 'Cogman', '(778)749-9930', 'ecogman6@wordpress.org');
insert into Agent (Agent_fname, Agent_lname, Agent_phone, Agent_email)
values ('Philipa', 'Berrisford', '(778)972-6156', 'pberrisford7@mysql.com');
insert into Agent (Agent_fname, Agent_lname, Agent_phone, Agent_email)
values ('Claudina', 'Jedrys', '(778)107-1549', 'cjedrys8@nasa.gov');
insert into Agent (Agent_fname, Agent_lname, Agent_phone, Agent_email)
values ('Batsheva', 'Tourot', '(778)676-9223', 'btourot9@qq.com');
insert into Agent (Agent_fname, Agent_lname, Agent_phone, Agent_email)
values ('Jason', 'Beamand', '(778)117-1529', 'jbeamand8@nasa.gov');
```

```

insert into Agent (Agent_fname, Agent_lname, Agent_phone, Agent_email)
values ('Bat', 'Smith', '(778)676-9623', 'bt@qq.com');

/*CusAgent data*/
insert into CusAgent (Customer_id, Agent_code) values (1010,203);
insert into CusAgent (Customer_id, Agent_code) values (1030,203);
insert into CusAgent (Customer_id, Agent_code) values (1020,201);
insert into CusAgent (Customer_id, Agent_code) values (1080,207);
insert into CusAgent (Customer_id, Agent_code) values (1090,204);
insert into CusAgent (Customer_id, Agent_code) values (1080,201);
insert into CusAgent (Customer_id, Agent_code) values (1040,205);
insert into CusAgent (Customer_id, Agent_code) values (1050,202);
insert into CusAgent (Customer_id, Agent_code) values (1060,206);
insert into CusAgent (Customer_id, Agent_code) values (1070,208);

/*Airline data*/
insert into Airline (Airline_code, Airline_name, Airline_phone, Airline_email)
values ('INA', 'Innocent', '(604)786-7992', 'cinnocent0@facebook.com');
insert into Airline (Airline_code, Airline_name, Airline_phone, Airline_email)
values ('BDA', 'Baldelli', '(604)732-8617', 'kbaldelli1@google.nl');
insert into Airline (Airline_code, Airline_name, Airline_phone, Airline_email)
values ('LMA', 'Laimable', '(604)867-0839', 'llaimable2@acquirethisname.com');
insert into Airline (Airline_code, Airline_name, Airline_phone, Airline_email)
values ('WLA', 'Wakelin', '(604)582-3122', 'ewakelin3@taobao.com');
insert into Airline (Airline_code, Airline_name, Airline_phone, Airline_email)
values ('GZA', 'Grizard', '(604)132-3705', 'jgrizard4@cam.ac.uk');
insert into Airline (Airline_code, Airline_name, Airline_phone, Airline_email)
values ('RGA', 'Rainger', '(604)981-3486', 'krainger5@un.org');
insert into Airline (Airline_code, Airline_name, Airline_phone, Airline_email)
values ('MCA', 'Mechan', '(604)851-1805', 'amechan6@twitter.com');
insert into Airline (Airline_code, Airline_name, Airline_phone, Airline_email)
values ('PHA', 'Presshaugh', '(604)504-2637', 'jpresshaugh7@ehow.com');
insert into Airline (Airline_code, Airline_name, Airline_phone, Airline_email)
values ('KLA', 'Klisch', '(604)644-6935', 'mklisch8@usnews.com');
insert into Airline (Airline_code, Airline_name, Airline_phone, Airline_email)
values ('SLA', 'Sullivan', '(604)791-6891', 'psullivan9@telegraph.co.uk');

/*RentalCompany data*/
insert into RentalCompany (RentalCompany_name, RentalCompany_phone,
RentalCompany_email)
values ('Netty', '(859)545-7651', 'npowder0@abc.net.au');
insert into RentalCompany (RentalCompany_name, RentalCompany_phone,
RentalCompany_email)
values ('Aeriell', '(938)270-7919', 'ahegdonne1@nyu.edu');
insert into RentalCompany (RentalCompany_name, RentalCompany_phone,
RentalCompany_email)
values ('Pietra', '(349)844-8899', 'pcorpe2@multiply.com');
insert into RentalCompany (RentalCompany_name, RentalCompany_phone,
RentalCompany_email)
values ('Dayna', '(662)272-8395', 'dklosa3@is.gd');
insert into RentalCompany (RentalCompany_name, RentalCompany_phone,
RentalCompany_email)
values ('Marlon', '(410)820-4722', 'mbroadstock4@artisteer.com');
insert into RentalCompany (RentalCompany_name, RentalCompany_phone,
RentalCompany_email)
values ('Bernie', '(807)881-5426', 'bwelds5@free.fr');
insert into RentalCompany (RentalCompany_name, RentalCompany_phone,
RentalCompany_email)

```

```

values ('Charmaine', '(611)475-0639', 'cgeggus6@sphinn.com');
insert into RentalCompany (RentalCompany_name, RentalCompany_phone,
RentalCompany_email)
values ('Stillmann', '(350)621-5409', 'sgilmartin7@nhs.uk');
insert into RentalCompany (RentalCompany_name, RentalCompany_phone,
RentalCompany_email)
values ('Brent', '(550)840-7790', 'btriggs8@odnoklassniki.ru');
insert into RentalCompany (RentalCompany_name, RentalCompany_phone,
RentalCompany_email)
values ('Sunny', '(816)600-2847', 'swesthofer9@independent.co.uk');
/*Flight data*/
insert into Flight (Flight_code, Flight_date, Flight_plane, Flight_airport,
Flight_time, Flight_arrival, Airline_code)
values ('IN304', '2019-05-06', 'F35', 'FR', '9:21', 'Istres', 'INA');
insert into Flight (Flight_code, Flight_date, Flight_plane, Flight_airport,
Flight_time, Flight_arrival, Airline_code)
values ('WL310', '2019-03-10', 'F35C', 'CN', '4:17', 'Jiangnan', 'WLA');
insert into Flight (Flight_code, Flight_date, Flight_plane, Flight_airport,
Flight_time, Flight_arrival, Airline_code)
values ('IN410', '2019-08-14', 'T50', 'JP', '20:05', 'Fukura', 'INA');
insert into Flight (Flight_code, Flight_date, Flight_plane, Flight_airport,
Flight_time, Flight_arrival, Airline_code)
values ('WL303', '2019-07-09', 'F35', 'CN', '7:23', 'Xixiang', 'WLA');
insert into Flight (Flight_code, Flight_date, Flight_plane, Flight_airport,
Flight_time, Flight_arrival, Airline_code)
values ('GZ301', '2019-03-08', 'F22', 'PT', '8:56', 'Serrinha', 'GZA');
insert into Flight (Flight_code, Flight_date, Flight_plane, Flight_airport,
Flight_time, Flight_arrival, Airline_code)
values ('PH330', '2019-06-21', 'KFX', 'CN', '13:06', 'Sanhen', 'PHA');
insert into Flight (Flight_code, Flight_date, Flight_plane, Flight_airport,
Flight_time, Flight_arrival, Airline_code)
values ('MC101', '2019-07-05', 'F22', 'CO', '16:58', 'PuNacional', 'MCA');
insert into Flight (Flight_code, Flight_date, Flight_plane, Flight_airport,
Flight_time, Flight_arrival, Airline_code)
values ('WL304', '2019-02-03', 'T50', 'PL', '17:19', 'Gniezno', 'WLA');
insert into Flight (Flight_code, Flight_date, Flight_plane, Flight_airport,
Flight_time, Flight_arrival, Airline_code)
values ('RG401', '2019-01-13', 'F35', 'SY', '8:01', 'Harf', 'RGA');
insert into Flight (Flight_code, Flight_date, Flight_plane, Flight_airport,
Flight_time, Flight_arrival, Airline_code)
values ('KL330', '2019-06-08', 'KFX', 'CY', '14:01', 'Klirou', 'KLA');

/*Car data*/
insert into Car (Car_make, Car_type, Car_model, Car_mileage, Car_color, Car_PLocation,
RentalCompany_code)
values ('TOYOTA', 'compact', 'yaris', 15043, 'white', 'yvr', 520 );
insert into Car (Car_make, Car_type, Car_model, Car_mileage, Car_color, Car_PLocation,
RentalCompany_code)
values ('CHRYSLER', 'luxury', '300s', 23341, 'black', 'yvr', 560 );
insert into Car (Car_make, Car_type, Car_model, Car_mileage, Car_color, Car_PLocation,
RentalCompany_code)
values ('VOLKSWAGEN', 'standard', 'jetta', 32012, 'white', 'downtown', 540);
insert into Car (Car_make, Car_type, Car_model, Car_mileage, Car_color, Car_PLocation,
RentalCompany_code)
values ('FORD', 'suv', 'escape', 12013, 'silver', 'vancouver', 520);
insert into Car (Car_make, Car_type, Car_model, Car_mileage, Car_color, Car_PLocation,
RentalCompany_code)

```

```

values ('TOYOTA','midsize','corolla',8012,'white','yvr',580);
insert into Car (Car_make, Car_type,Car_model, Car_mileage, Car_color, Car_PLocation,
RentalCompany_code)
values ('NISSAN','suv','rouge',36032,'green','burnaby',600);
insert into Car (Car_make, Car_type,Car_model, Car_mileage, Car_color, Car_PLocation,
RentalCompany_code)
values ('HYUNDAI','compact','accent',10223,'yellow','downtown',620);
insert into Car (Car_make, Car_type,Car_model, Car_mileage, Car_color, Car_PLocation,
RentalCompany_code)
values ('KIA','economy','rio',28914,'black','yvr',600);
insert into Car (Car_make, Car_type,Car_model, Car_mileage, Car_color, Car_PLocation,
RentalCompany_code)
values ('MAZDA','economy','mazda2',20025,'yellow','yvr',580);
insert into Car (Car_make, Car_type,Car_model, Car_mileage, Car_color, Car_PLocation,
RentalCompany_code)
values ('HONDA','standard','civic',33079,'black','yvr',540)

/*Seat Reservation*/
insert into SeatReservation (SeatReservation_class, SeatReservation_seat ,
SeatReservation_luggage, SeatReservation_price, Flight_code, Agent_code, Customer_id )
values ('first','A2', 1, '$700', 'IN304', 203, 1010);
insert into SeatReservation (SeatReservation_class, SeatReservation_seat ,
SeatReservation_luggage, SeatReservation_price, Flight_code, Agent_code, Customer_id )
values ('economy','A22', 1, '$120', 'WL310', 203, 1030);
insert into SeatReservation (SeatReservation_class, SeatReservation_seat ,
SeatReservation_luggage, SeatReservation_price, Flight_code, Agent_code, Customer_id )
values ('economy', 'D20', 1, '$134', 'IN304', 201, 1020);
insert into SeatReservation (SeatReservation_class, SeatReservation_seat ,
SeatReservation_luggage, SeatReservation_price, Flight_code, Agent_code, Customer_id )
values ('business', 'E7', 2, '$379', 'KL330', 207, 1080);
insert into SeatReservation (SeatReservation_class, SeatReservation_seat ,
SeatReservation_luggage, SeatReservation_price, Flight_code, Agent_code, Customer_id )
values ('economy', 'F22', 1, '$200', 'IN304', 204, 1090);

/*Car Reservation*/
insert into CarReservation (CarReservation_PDate, CarReservation_RDate ,
CarReservation_price, Car_id, Agent_code, Customer_id )
values ('12/27/2018', '12/29/2018', '$120', 3010, 201, 1080);
insert into CarReservation (CarReservation_PDate, CarReservation_RDate ,
CarReservation_price, Car_id, Agent_code, Customer_id )
values ('12/02/2018', '12/7/2017', '$180', 3050, 205, 1040);
insert into CarReservation (CarReservation_PDate, CarReservation_RDate ,
CarReservation_price, Car_id, Agent_code, Customer_id )
values ('12/15/2018', '12/19/2017', '$145', 3040, 202, 1050);
insert into CarReservation (CarReservation_PDate, CarReservation_RDate ,
CarReservation_price, Car_id, Agent_code, Customer_id )
values ('12/18/2018', '12/23/2018', '$90', 3050, 206, 1060);
insert into CarReservation (CarReservation_PDate, CarReservation_RDate ,
CarReservation_price, Car_id, Agent_code, Customer_id )
values ('12/13/2018', '12/17/2018', '$200', 3020, 208, 1070);

```


Customer

| select * from Customer | | | | | | |
|------------------------|-------------|----------------|----------------|----------------|---------------------------|---------------------|
| 100 % | | | | | | |
| Results Messages | | | | | | |
| | Customer_id | Customer_fname | Customer_lname | Customer_phone | Customer_email | Customer_membership |
| 1 | 1000 | Jeff | Clowser | (236)992-0610 | jclowser0@smugmug.com | NULL |
| 2 | 1010 | Carol | Marwood | (778)645-5945 | cmarwood1@netvibes.com | NULL |
| 3 | 1020 | Amata | Moss | (778)123-0176 | amoss2@360.cn | Member |
| 4 | 1030 | Yoshi | Paulitschke | (778)938-3879 | ypaulitschke3@hexun.com | Member |
| 5 | 1040 | Esmaria | Boik | (236)646-4452 | eboik4@amazonaws.com | Member |
| 6 | 1050 | Harbert | Pittford | (778)756-4153 | hpittford5@amazon.com | Member |
| 7 | 1060 | Thadeus | Le Marchant | (778)360-0649 | tlemarchant6@cnn.com | NULL |
| 8 | 1070 | Celinda | Sissel | (236)277-5630 | csissel7@comsenz.com | NULL |
| 9 | 1080 | Gwendolin | Mallabon | (236)391-6214 | gmallabon8@netscape.com | NULL |
| 10 | 1090 | Nicko | Castells | (778)836-9017 | ncastells9@feedburner.com | NULL |

Agent

| select * from Agent | | | | | |
|---------------------|------------|-------------|-------------|---------------|------------------------|
| 100 % | | | | | |
| Results Messages | | | | | |
| | Agent_code | Agent_fname | Agent_lname | Agent_phone | Agent_email |
| 1 | 200 | Skipper | Matejka | (778)709-0201 | smatejka0@phpbb.com |
| 2 | 201 | Moselle | Borton | (778)459-7202 | mborton1@google.fr |
| 3 | 202 | Fayina | Portam | (778)357-7897 | fportam2@github.io |
| 4 | 203 | Tuckie | Spurdle | (778)563-2810 | tspurdle3@bluehost.com |
| 5 | 204 | Reina | Mackney | (778)656-3211 | rmackney4@bandcamp.com |
| 6 | 205 | Hewett | Beamand | (778)179-3722 | hbeamand5@mapy.cz |
| 7 | 206 | Edie | Cogman | (778)749-9930 | ecogman6@wordpress.org |
| 8 | 207 | Philipa | Berrisford | (778)972-6156 | pberrisford7@mysql.com |
| 9 | 208 | Claudina | Jedrys | (778)107-1549 | cjedrys8@nasa.gov |
| 10 | 209 | Batsheva | Tourot | (778)676-9223 | btourot9@qq.com |
| 11 | 210 | Jason | Beamand | (778)117-1529 | jbeamand8@nasa.gov |
| 12 | 211 | Bat | Smith | (778)676-9623 | bt@qq.com |

CusAgnat

select * from CusAgent

100 %

Results Messages

| | Customer_id | Agent_code |
|----|-------------|------------|
| 1 | 1010 | 203 |
| 2 | 1020 | 201 |
| 3 | 1030 | 203 |
| 4 | 1040 | 205 |
| 5 | 1050 | 202 |
| 6 | 1060 | 206 |
| 7 | 1070 | 208 |
| 8 | 1080 | 201 |
| 9 | 1080 | 207 |
| 10 | 1090 | 204 |

Airline

select * from Airline

100 %

Results Messages

| | Airline_code | Airline_name | Airline_phone | Airline_email |
|----|--------------|--------------|---------------|--------------------------------|
| 1 | BDA | Baldelli | (604)732-8617 | kbaldelli1@google.nl |
| 2 | GZA | Grizard | (604)132-3705 | jgrizard4@cam.ac.uk |
| 3 | INA | Innocent | (604)786-7992 | cinnocent0@facebook.com |
| 4 | KLA | Klisch | (604)644-6935 | mklisch8@usnews.com |
| 5 | LMA | Laimable | (604)867-0839 | llaimable2@acquirethisname.com |
| 6 | MCA | Mechan | (604)851-1805 | amechan6@twitter.com |
| 7 | PHA | Presshaugh | (604)504-2637 | jpresshaugh7@ehow.com |
| 8 | RGA | Rainger | (604)981-3486 | krainger5@un.org |
| 9 | SLA | Sullivan | (604)791-6891 | psullivan9@telegraph.co.uk |
| 10 | WLA | Wakelin | (604)582-3122 | ewakelin3@taobao.com |

RentalCompany

`select * from RentalCompany`

100 %

Results Messages

| | RentalCompany_code | RentalCompany_name | RentalCompany_phone | RentalCompany_email |
|----|--------------------|--------------------|---------------------|-------------------------------|
| 1 | 500 | Netty | (859)545-7651 | npowder0@abc.net.au |
| 2 | 520 | Aeriell | (938)270-7919 | ahegdonne1@nyu.edu |
| 3 | 540 | Pietra | (349)844-8899 | pcorpe2@multiply.com |
| 4 | 560 | Dayna | (662)272-8395 | dklosa3@is.gd |
| 5 | 580 | Marlon | (410)820-4722 | mbroadstock4@artisteer.com |
| 6 | 600 | Bernie | (807)881-5426 | bwelds5@free.fr |
| 7 | 620 | Charmaine | (611)475-0639 | cgeggus6@sphinn.com |
| 8 | 640 | Stillmann | (350)621-5409 | sgilmartin7@nhs.uk |
| 9 | 660 | Brent | (550)840-7790 | btriggs8@odnoklassniki.ru |
| 10 | 680 | Sunny | (816)600-2847 | swesthofer9@independent.co.uk |

Flight

`select * from Flight`

100 %

Results Messages

| | Flight_code | Flight_date | Flight_plane | Flight_airport | Flight_time | Flight_arrival | Airline_code |
|----|-------------|-------------------------|--------------|----------------|-------------------------|----------------|--------------|
| 1 | GZ301 | 2019-03-08 00:00:00.000 | F22 | PT | 1900-01-01 08:56:00.000 | Serrinha | GZA |
| 2 | IN304 | 2019-05-06 00:00:00.000 | F35 | FR | 1900-01-01 09:21:00.000 | Istres | INA |
| 3 | IN410 | 2019-08-14 00:00:00.000 | T50 | JP | 1900-01-01 20:05:00.000 | Fukura | INA |
| 4 | KL330 | 2019-06-08 00:00:00.000 | KFX | CY | 1900-01-01 14:01:00.000 | Klirou | KLA |
| 5 | MC101 | 2019-07-05 00:00:00.000 | F22 | CO | 1900-01-01 16:58:00.000 | PuNacional | MCA |
| 6 | PH330 | 2019-06-21 00:00:00.000 | KFX | CN | 1900-01-01 13:06:00.000 | Sanhen | PHA |
| 7 | RG401 | 2019-01-13 00:00:00.000 | F35 | SY | 1900-01-01 08:01:00.000 | ?arf | RGA |
| 8 | WL303 | 2019-07-09 00:00:00.000 | F35 | CN | 1900-01-01 07:23:00.000 | Xixiang | WLA |
| 9 | WL304 | 2019-02-03 00:00:00.000 | T50 | PL | 1900-01-01 17:19:00.000 | Gniezno | WLA |
| 10 | WL310 | 2019-03-10 00:00:00.000 | F35C | CN | 1900-01-01 04:17:00.000 | Jiangnan | WLA |

Car

`select * from Car`

100 %

Results Messages

| | Car_id | Car_make | Car_type | Car_model | Car_mileage | Car_color | Car_PLocation | RentalCompany_code |
|----|--------|------------|----------|-----------|-------------|-----------|---------------|--------------------|
| 1 | 3000 | TOYOTA | compact | yaris | 15043 | white | yr | 520 |
| 2 | 3010 | CHRYSLER | luxury | 300s | 23341 | black | yr | 560 |
| 3 | 3020 | VOLKSWAGEN | standard | jetta | 32012 | white | downtown | 540 |
| 4 | 3030 | FORD | suv | escape | 12013 | silver | vancouver | 520 |
| 5 | 3040 | TOYOTA | midsize | corolla | 8012 | white | yr | 580 |
| 6 | 3050 | NISSAN | suv | rouge | 36032 | green | burnaby | 600 |
| 7 | 3060 | HYUNDAI | compact | accent | 10223 | yellow | downtown | 620 |
| 8 | 3070 | KIA | economy | rio | 28914 | black | yr | 600 |
| 9 | 3080 | MAZDA | economy | mazda2 | 20025 | yellow | yr | 580 |
| 10 | 3090 | HONDA | standard | civic | 33079 | black | yr | 540 |

SeatReservation

| select * from SeatReservation | | | | | | | | |
|-------------------------------|-------------|-----------------------|----------------------|-------------------------|-----------------------|-------------|------------|-------------|
| 100 % | | | | | | | | |
| Results Messages | | | | | | | | |
| | Ticket_code | SeatReservation_class | SeatReservation_seat | SeatReservation_luggage | SeatReservation_price | Flight_code | Agent_code | Customer_id |
| 1 | 3000 | first | A2 | 1 | 700.00 | IN304 | 203 | 1010 |
| 2 | 3010 | economy | A22 | 1 | 120.00 | WL310 | 203 | 1030 |
| 3 | 3020 | economy | D20 | 1 | 134.00 | IN304 | 201 | 1020 |
| 4 | 3030 | business | E7 | 2 | 379.00 | KL330 | 207 | 1080 |
| 5 | 3040 | economy | F22 | 1 | 200.00 | IN304 | 204 | 1090 |

CarReservation

| select * from CarReservation | | | | | | | |
|------------------------------|---------------------|-------------------------|-------------------------|----------------------|--------|------------|-------------|
| 100 % | | | | | | | |
| Results Messages | | | | | | | |
| | CarReservation_code | CarReservation_PDate | CarReservation_RDate | CarReservation_price | Car_id | Agent_code | Customer_id |
| 1 | 300 | 2018-12-27 00:00:00.000 | 2018-12-29 00:00:00.000 | 120.00 | 3010 | 201 | 1080 |
| 2 | 310 | 2018-12-02 00:00:00.000 | 2017-12-07 00:00:00.000 | 180.00 | 3050 | 205 | 1040 |
| 3 | 320 | 2018-12-15 00:00:00.000 | 2017-12-19 00:00:00.000 | 145.00 | 3040 | 202 | 1050 |
| 4 | 330 | 2018-12-18 00:00:00.000 | 2018-12-23 00:00:00.000 | 90.00 | 3050 | 206 | 1060 |
| 5 | 340 | 2018-12-13 00:00:00.000 | 2018-12-17 00:00:00.000 | 200.00 | 3020 | 208 | 1070 |

Sample Queries

- ❖ Query: List the name of the company and the number of black cars if the company has a black car.

```
select 'company' = RentalCompany.RentalCompany_name, 'black_cars' =  
count(car.car_color)  
from car join RentalCompany on car.RentalCompany_code =  
RentalCompany.RentalCompany_code  
where car.car_color = 'black'  
group by RentalCompany.RentalCompany_name  
order by company
```

| company | black_cars |
|---------|------------|
| Bernie | 1 |
| Dayna | 1 |
| Pietra | 1 |

(3 rows affected)

- ❖ Query: List all agent's first names, codes, and the first name, ids of the customers they are assigned to, including the agents who are assigned to more than one customer and those who haven't been assigned to any customer.

```
select Agent.Agent_fname, Agent.Agent_code, Customer.Customer_fname,  
Customer.Customer_id  
from Agent left join CusAgent on Agent.Agent_code = CusAgent.Agent_code  
left join Customer on CusAgent.Customer_id = Customer.Customer_id
```

| Agent_fname | Agent_code | Customer_fname | Customer_id |
|-------------|------------|----------------|-------------|
| Skipper | 200 | NULL | NULL |
| Moselle | 201 | Amata | 1020 |
| Moselle | 201 | Gwendolin | 1080 |
| Fayina | 202 | Harbert | 1050 |
| Tuckie | 203 | Carol | 1010 |
| Tuckie | 203 | Yoshi | 1030 |
| Reina | 204 | Nicko | 1090 |
| Hewett | 205 | Esmaria | 1040 |
| Edie | 206 | Thadeus | 1060 |
| Philipa | 207 | Gwendolin | 1080 |
| Claudina | 208 | Celinda | 1070 |
| Batsheva | 209 | NULL | NULL |
| Jason | 210 | NULL | NULL |
| Bat | 211 | NULL | NULL |

(14 rows affected)

- ❖ Query: List the first names, ids of the customer who booked a flight tick and also reserved a car.

```
select Customer_id, Customer_fname
from Customer
where Customer_id in (select Customer_id from SeatReservation) and Customer_id in
(select Customer_id from CarReservation)
```

| Customer_id | Customer_fname |
|-------------|----------------|
| 1080 | Gwendolin |

(1 row affected)

- ❖ Query: List the airlines that have seats booked by the customers and the total profits.

```
select 'Airline' = a.Airline_name, 'Total' = sum(s.SeatReservation_price)
from Flight f
join Airline a on f.Airline_code = a.Airline_code
join SeatreseRvation s on f.Flight_code = s. Flight_code
group by a.Airline_name
```

| Airline | Total |
|----------|---------|
| Innocent | 1034.00 |
| Klisch | 379.00 |
| Wakelin | 120.00 |

(3 rows affected)

- ❖ Query: List the customer's first name, id, membership, total spending on flight ticket and car rental, and the average spending of each type of membership.

```
Select c.Customer_fname,c.Customer_id, 'Membership'=isNull(c.Customer_membership,'-'),
'Total' = isNull(s.SeatReservation_price,0)+ isNull(cr.CarReservation_price,0),
'Average' = avg(isNull(s.SeatReservation_price,0)+isNull(cr.CarReservation_price,0))
over (partition by c.Customer_membership)
from Customer c full join SeatReservation s on c.Customer_id = s.Customer_id
full join CarReservation cr on c.Customer_id = cr.Customer_id
where s.SeatReservation_price is not null or cr.CarReservation_price is not null
```

| Customer_fname | Customer_id | Membership | Total | Average |
|----------------|-------------|------------|--------|---------|
| ----- | ----- | ----- | ----- | ----- |
| Carol | 1010 | - | 700.00 | 337.80 |
| Thadeus | 1060 | - | 90.00 | 337.80 |
| Celinda | 1070 | - | 200.00 | 337.80 |
| Gwendolin | 1080 | - | 499.00 | 337.80 |
| Nicko | 1090 | - | 200.00 | 337.80 |
| Amata | 1020 | Member | 134.00 | 144.75 |
| Yoshi | 1030 | Member | 120.00 | 144.75 |
| Esmaria | 1040 | Member | 180.00 | 144.75 |
| Harbert | 1050 | Member | 145.00 | 144.75 |

(9 rows affected)

- ❖ View: A view with the first names, phone numbers, emails of the customers who booked a flight ticket and are not a member of this website. It also includes the current price and a price with a discount.
- ❖ Purpose: The agents can use the view to contact the customers and offer a new price with 10% off their tickets if they would like to become a member.

```
create view vw_member_price as
select 'Name' = c.Customer_fname, 'Phone' = c.Customer_phone, 'e-mail' =
c.Customer_email, 'Price' = s.SeatReservation_price, 'New_Ticket_Price' =
s.SeatReservation_price * 0.9
from Customer c join SeatReservation s on c.Customer_id = s.Customer_id
where c.Customer_membership is null
```

```
select *
from vw_member_price
where Phone like '(778)%'
```

| Name | Phone | e-mail | Price | New_Ticket_Price |
|-------|---------------|----------------------------------|--------|------------------|
| ----- | ----- | ----- | ----- | ----- |
| Carol | (778)645-5945 | cmarwood1@netvibes.com | 700.00 | 630.00000 |
| Nicko | (778)836-9017 | <u>ncastells9@feedburner.com</u> | 200.00 | 180.00000 |