# Dealership Database Report

Description: This is a car dealership database that stores customer, dealership, salesperson, manufacturer, and car data into one database. This database application helps dealerships organize, store, and retrieve data enabling them to access valuable insights and relevant information as needed.

SQL Code:

```
 create table Customer
(CustomerID int,
 FirstName varchar(50),
 LastName varchar(50),
 State varchar(50),
 ZipCode int,
 City varchar(50)  Primary
key (CustomerID));

 create table Dealership
 (DealershipID int,
 Phone int,
 City varchar(50),
 DealershipName varchar(50),
Primary key (DealershipID));

 create table SalesPerson
(SalesPersonID int,
 FirstName varchar(50),
 LastName varchar(50),
 Email varchar(50),
 City varchar(50),
 StateName varchar(50),
 DealershipID int,
 Primary key (SalesPersonID),
 Foreign key (DealershipID) references Dealership);

 create table Sale
(SaleID int,
 SaleDate date,
```

```
 CustomerID int,
 SalesPersonID int,
 Primary key (SaleID),
 Foreign key (CustomerID) references Customer,
 Foreign key (SalesPersonID) references SalesPerson);

 create table Manufacturer
 (ManufacturerID int,
 Phone int,
 ManufacturerName varchar(50),
 City varchar(50),
 StateName varchar(50)
Primary key (ManufacturerID));

 create table Car
(CarID int,
 ManufacturerID int,
 DealershipID int,
 Price int,
 Color varchar(50),
YearDate int,
 Make varchar(50),
 Model varchar(50),
 Primary key (CarID),
 Foreign key (ManufacturerID) references Manufacturer,
Foreign key (DealershipID) references Dealership);

 insert into Car values
 (100, 4, 1, null, null, null, 'Tesla', 'Model Y'),
 (101, 4, 1, null, null, null, 'Audi' , 'A4'),
 (102, 4, 1, null, null, null, 'Chevrolet' , 'Camaro')
 (218, 7, 1, 74700, 'black',2023, 'BMW', 'M4')
 (28, 5, 1, 6600, 'gray', 2010, 'Honda','Civic')
 (3, 4, 1, 12000, 'black', 2014,'Ford','Mustang'),
 (7, 4, 1, 9999, 'red', 2011, 'Ford','Mustang'),
 (9, 4, 1, 17000, 'gray', 2018, 'Ford','Mustang'),
 (12, 4, 1, 19000, 'white', 2020, 'Ford','Mustang'),
(15, 4, 1, 14500, 'yellow', 2016, 'Ford','Mustang')
```

insert into Manufacturer values
(7, null, 'BMW','Los Angeles','CA')
(5, null, 'Honda', 'Los Angeles', 'CA')
(4, 323456987, 'Ford', 'San Diego', 'CA')
insert into Dealership values (1, null,
'San Diego', 'San Diego Cars')

insert into Salesperson values
(27, 'Kori', 'Gregory', 'kori@SDcars.com','San Diego', 'CA', 1),
(69, 'Devon', 'Brady', 'Devon@SDcars.com', 'San Diego','CA', 1),
(46, 'Andrea', 'Garcia' , 'Andrea@SDcars.com','San Diego', 'CA',1),
(89, 'Roberto', 'Diaz', 'Roberto@SDcars.com','San Diego','CA',1)

```
-- Manager wants to email all employees at a dealership

select Firstname, Lastname, Email
from salesperson
where dealershipid = 1
```

200 %

Results Messages

| | Firstname | Lastname | Email |
|---|---|---|---|
| 1 | Kori | Gregory | kori@SDcars.com |
| 2 | Andrea | Garcia | Andrea@SDcars.com |
| 3 | Devon | Brady | Devon@SDcars.com |
| 4 | Roberto | Diaz | Roberto@SDcars.com |

```
--Customer wants to know what Mustangs are under $20,000

select *
from Car
where model = 'mustang' and not price > 20000
```

200 %

Results Messages

| | CarID | ManufacturerID | DealershipID | Price | Color | YearDate | Make | Model |
|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 4 | 1 | 12000 | black | 2014 | Ford | Mustang |
| 2 | 7 | 4 | 1 | 9999 | red | 2011 | Ford | Mustang |
| 3 | 9 | 4 | 1 | 17000 | gray | 2018 | Ford | Mustang |
| 4 | 12 | 4 | 1 | 19000 | white | 2020 | Ford | Mustang |
| 5 | 15 | 4 | 1 | 14500 | yellow | 2016 | Ford | Mustang |

```sql
--Manager wants to find out the make and model of cars manufactured in CA

select distinct Make, Model
from car c
join manufacturer m on c.manufacturerid=m.manufacturerid
where Statename = 'CA'
```

200 %

Results | Messages

| | Make | Model |
|---|---|---|
| 1 | Audi | A4 |
| 2 | BMW | M4 |
| 3 | Chevrolet | Camarro |
| 4 | Ford | Mustang |
| 5 | Honda | Civic |
| 6 | Tesla | Model Y |

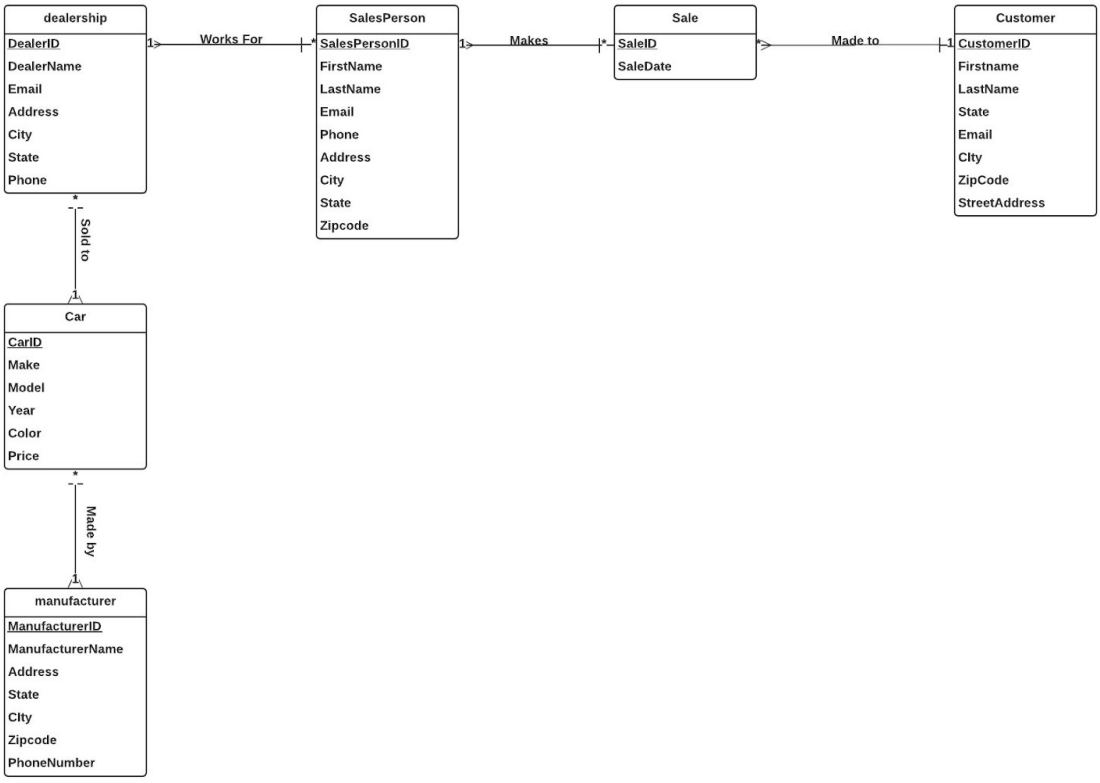
```sql
--Employee wants to know the highest, lowest, and average price of cars at the dealership

select min(Price) as 'Lowest Price', max(Price) as 'Highest Price' ,
avg(Price) as 'Average Price'
from car
where dealershipid = 1
```

200 %

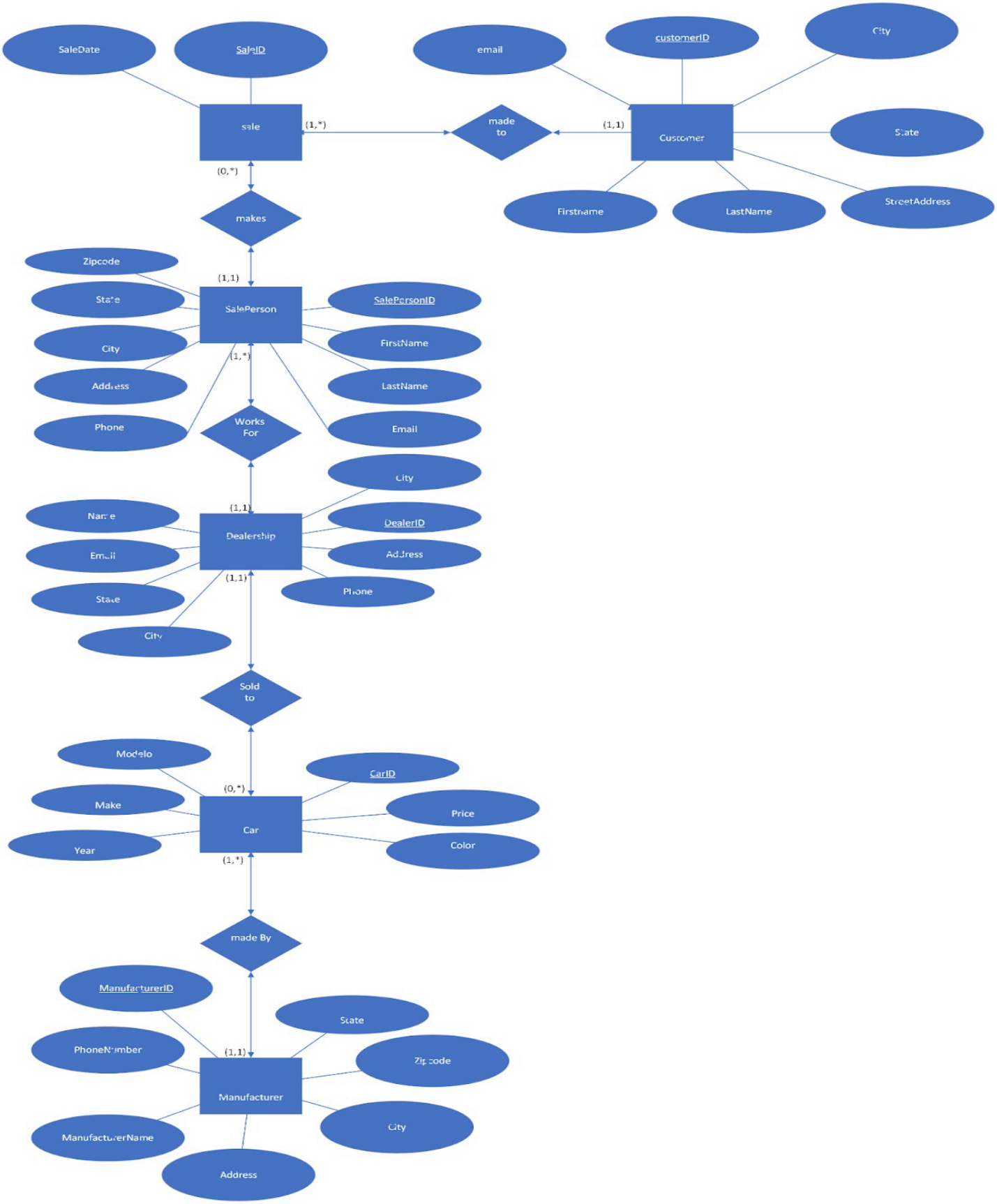
Results | Messages

| | Lowest Price | Highest Price | Average Price |
|---|---|---|---|
| 1 | 6600 | 74700 | 21971 |

ERD:


dealership
DealerID
DealerName
Email
Address
City
State
Phone
Works For
1
*
SalesPerson
SalesPersonID
FirstName
LastName
Email
Phone
Address
City
State
Zipcode
Makes
1
*
Sale
SaleID
SaleDate
Made to
*
1
Customer
CustomerID
Firstname
LastName
State
Email
CIty
ZipCode
StreetAddress
Sold to
*
1
Car
CarID
Make
Model
Year
Color
Price
Made by
*
1
manufacturer
ManufacturerID
ManufacturerName
Address
State
CIty
Zipcode
PhoneNumber

UML:


SaleDate
SaleID
sale
(1,*)
made to
(1,1)
Customer
email
customerID
City
State
StreetAddress
LastName
Firstname
(0,*)
makes
(1,1)
SalePerson
Zipcode
State
City
Address
Phone
SalePersonID
FirstName
LastName
Email
(1,*)
Works For
(1,1)
Dealership
Name
Email
State
City
DealerID
Address
Phone
City
(1,1)
Sold to
(0,*)
Car
Modelo
Make
Year
CarID
Price
Color
(1,*)
made By
(1,1)
Manufacturer
ManufacturerID
PhoneNumber
ManufacturerName
State
Zipcode
City
Address