A

Project Report

on

DATABASE MANAGEMENT SYSTEM

CAR MANUFACTURING COMPANY

DEVELOPED BY:

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DHARMSINH DESAI UNIVERSITY
NADIAD-387001, GUJARAT

CERTIFICATE

This is to certify that the project entitled CAR MANUFACTURING COMPANY
is a bonafied report of the work carried out by

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         Student ID No: 16ITUOS059

of Department of Information Technology, semester V, under the guidance and supervision
for the subject Database Management System. They were involved in Project training during
academic year 2018-2019.

 Prof. Sunil K. Vithlani(Project Guide)
Department of Information Technology,
Faculty of Technology,
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Date:

Prof. Vipul Dabhi
Head, Department of Information Technology,
Faculty of Technology,
Dharmsinh Desai University, Nadiad
Date:

ACKNOWLEDGEMENT

This project is being the first one undertaken by us was an unforgettable and educative experience. We take this opportunity to thank all those who have generously helped us to give a proper shape to our work.

Our Sincerest appreciation must be extended to ddit, nadiad. We also want to thanks faculties of our college, they have been very kind & helpful to us.

We are thankful to Prof. S.K.VITHLANI who had given a nice guidance & support to us to fulfil and complete the project within duration.

Finally, I would like to thank my head of the department Prof. V.K.DABHI for his constant guidance,encouragement and moral support.

Yours Sincerely

UDEET PATEL

SHAILESH PATEL

TABLE OF CONTENTS

1. SYSTEM OVERVIEW

1.1 CURRENT SYSTEM

CAR MANUFACTURING COMPANY Database System have tables called CUSTOMER , ADDRESS , PHONE NO. , PAYMENT , OPTION , CAR , MODEL , SHOWROOM , PAYMENT , MANUFACTURER , COMPANY. Using these tables we can find any information.

If we want to implement then we can implement that using this system and achieve desired functionalities.Functionalities can be related to any of person who needs the information related to any product.The tables used in system probably have all the useful attribute in it through which information can be generated. And also it contains many Procedures to Manage Database. All updates done on Data Items is reflected on Database using trigger.

1.2 OBJECTIVES OF THE PROPOSED SYSTEM

1. Customer can make a payment .
2. Record all customer details who buy car from any showroom of the company .
3. Company provides many models for his customer and also all models have different options .
4. For installment of payment showroom have details of customer's payment at every month and also total payment made by customer.

1.3 ADVANTAGES OF THE PROPOSED SYSTEM (OVER CURRENT)

- Customer can get all the details of car-company , car model , car manufacturer.

- Customer also can get details about at which rate car is available.

- Customer can buy car.

- All table details can be easily managed and supervised.

- Customer can have option for chossing different car model of different company.

- Car model have differrnt option as per customer's requirement.

- This database will automatically add age in age(at the time of inserting) column by subtracting current year with the year of birth.

- In this database user will enter the id of car and the procedure will count the total amount he or she already has paid and how much is remaining.

- In this database user need to enter the data in car table(means user is going to by a car) but if in car model table availabity's status is "not available" for the car model chose by user he or she can not add this(buy the car with that car model).

- In this database user will enter the name of company and the procedure will count Net income of that company by calculating the base price of car sold by that company.

2. E-R DIAGRAM
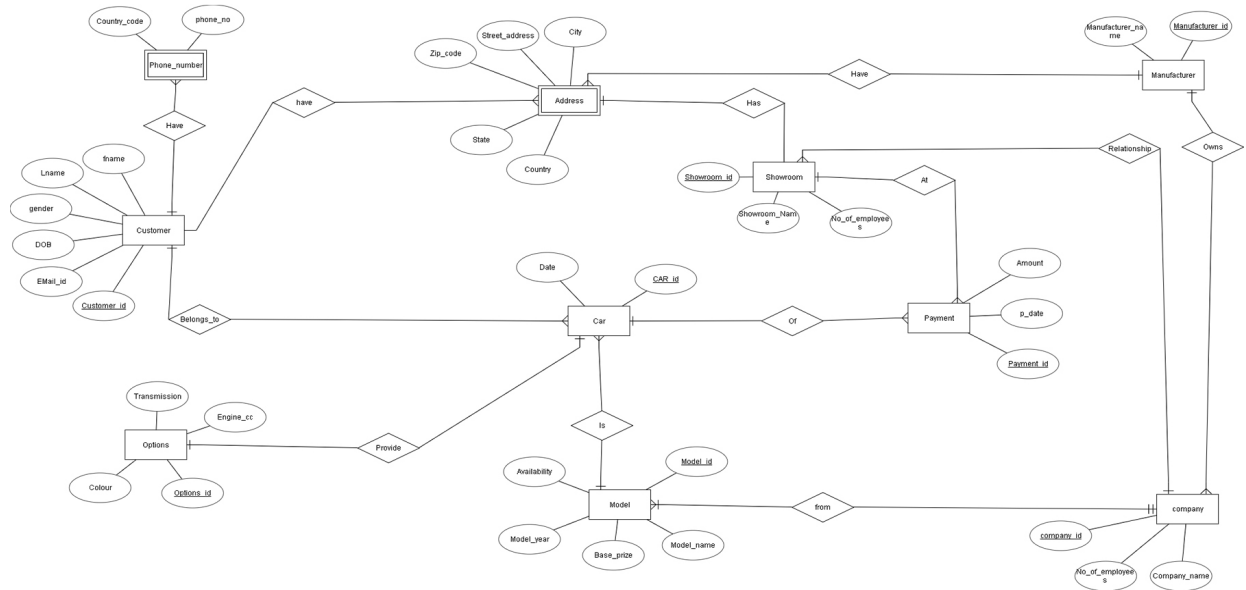
2.1 ENTITIES

- Options
- Car_model
- Car_company
- Customer
- Address
- Phone_number
- Showroom
- Manufacturer
- Car
- Payment

2.2 RELATIONSHIPS AN MAPPING CONSTRAINTS

- Customer has one to many relationship with Car.
  Relation name : Belongs to
- Customer has one to many relationship with Address.
  Relation name : Have
- Customer has one to many relationship with Phone_number.
  Relation name : Have
- Manufacture has one to many relationship with Address.
  Relation name : Have
- Manufacture has one to many relationship with Company.
  Relation name : Owns
- Company has one to many relationship with Showroom.
  Relation name : Relationship
- Car has one to many relationship with Payment.
  Relation name : Cr
- Model has one to many relationship with Car.
  Relation name : Is
- Company has one to many relationship with Model.
  Relation name : From
- Showroom has one to many relationship with Payment.
  Relation name : At
- Address has one to one relationship with Showroom.
  Relation name : Has

3. DATA DICTONARY

1. CAR

Field	Type	Null	Key	Default	Extra
CAR id	varchar(5)	NO	PRI	NULL	
fk option id car	varchar(5)	NO	MUL	NULL	
fk customer id car	varchar(5)	NO	MUL	NULL	
fk model id car	varchar(5)	NO	MUL	NULL	
ddate	date	YES		NULL	

2. CAR_MODEL

Field	Type	Null	Key	Default	Extra
Model Year	double	NO		NULL	
model id	varchar(5)	NO	PRI	NULL	
model name	varchar(15)	NO		NULL	
availability	varchar(15)	NO		NULL	
Base price	double	NO		NULL	
fk company id model	varchar(5)	NO	MUL	NULL	

3. CUSTOMER

Field	Type	Null	Key	Default	Extra
Customer id	varchar(5)	NO	PRI	NULL	
fname	varchar(15)	NO		NULL	
Lname	varchar(15)	NO		NULL	
gender	varchar(15)	NO		NULL	
dob	date	NO		NULL	
email id	varchar(30)	NO		NULL	
Age	int(11)	NO		NULL	

4. CAR_COMPANY

Field	Type	Null	Key	Default	Extra
company id	varchar(5)	NO	PRI	NULL	
Company name	varchar(15)	YES		NULL	
No of employees	int(11)	YES		NULL	
fk Manufacture id company	varchar(5)	NO	MUL	NULL	

5. SHOWROOM

Field	Type	Null	Key	Default	Extra
Showroom id	varchar(5)	NO	PRI	NULL	
Showroom Name	varchar(20)	YES		NULL	
No of employees	int(11)	YES		NULL	
fk company id showroom	varchar(5)	NO	MUL	NULL	

6. PHONE_NUMBER

Field	Type	Null	Key	Default	Extra
phone no	bigint(10)	NO		NULL	
Country code	int(2)	NO		NULL	
fk Customer id phone	varchar(5)	NO	MUL	NULL	

7. PAYMENT

Field	Type	Null	Key	Default	Extra
payment id	varchar(5)	NO	PRI	NULL	
fk Car id payment	varchar(5)	NO	MUL	NULL	
fk Showroom id payment	varchar(5)	NO	MUL	NULL	
amount	double	NO		NULL	
Pdate	date	NO		NULL	

8. OPTION

Field	Type	Null	Key	Default	Extra
Options id	varchar(5)	NO	PRI		
Engine cc	varchar(45)	NO			
Transmission	varchar(45)	NO		NULL	
color	varchar(15)	NO		NULL	

Export recordset to an external file

9. MANUFACTURER

Field	Type	Null	Key	Default	Extra
Manufacturer id	varchar(5)	NO	PRI	NULL	
Manufacturer Name	varchar(20)	NO		NULL	

10. ADDRESS

Field	Type	Null	Key	Default	Extra
zip code	int(11)	NO		NULL	
street address	varchar(45)	NO		NULL	
city	varchar(15)	NO		NULL	
state	varchar(15)	NO		NULL	
country	varchar(15)	NO		NULL	
fk Customer id address	varchar(5)	YES	MUL	NULL	
fk Manufacturer id address	varchar(5)	YES	MUL	NULL	
Showroom Showroom id	varchar(5)	YES	MUL	NULL	

4. SCHEMA DAIGRAM

customer
- 🔑 Customer_id VARCHAR(5)
- ◇ fname VARCHAR(15)
- ◇ Lname VARCHAR(15)
- ◇ gender VARCHAR(15)
- ◇ dob DATE
- ◇ email_id VARCHAR(30)
- Indexes ▶

phone_number
- ◇ phone_no BIGINT(10)
- ◇ Country_code INT(2)
- ● fk_Customer_id_phone VARCHAR(5)
- Indexes ▶

address
- ◇ zip_code INT(11)
- ◇ street_address VARCHAR(45)
- ◇ city VARCHAR(15)
- ◇ state VARCHAR(15)
- ◇ country VARCHAR(15)
- ● fk_Customer_id_address VARCHAR(5)
- ● fk_Manufacturer_id_address VARCHAR(5)
- ◇ Showroom_Showroom_id VARCHAR(5)
- Indexes ▶

options
- 🔑 Options_id VARCHAR(5)
- ◇ Engine_cc VARCHAR(45)
- ◇ Transmission VARCHAR(45)
- ◇ color VARCHAR(15)
- Indexes ▶

car
- 🔑 CAR_id VARCHAR(5)
- ● fk_option_id_car VARCHAR(5)
- ● fk_customer_id_car VARCHAR(5)
- ● fk_model_id_car VARCHAR(5)
- ◇ ddate DATE
- Indexes ▶

car_model
- ◇ Model_Year DOUBLE
- 🔑 model_id VARCHAR(5)
- ◇ model_name VARCHAR(15)
- ◇ availability VARCHAR(15)
- ◇ Base_price DOUBLE
- ● fk_company_id_model VARCHAR(5)
- Indexes ▶

car_company
- 🔑 company_id VARCHAR(5)
- ◇ Company_name VARCHAR(15)
- ◇ No_of_employees INT(11)
- ● fk_Manufacture_id_company VARCHAR(5)
- Indexes ▶

manufacturer
- 🔑 Manufacturer_id VARCHAR(5)
- ◇ Manufacturer_Name VARCHAR(20)
- Indexes ▶

showroom
- 🔑 Showroom_id VARCHAR(5)
- ◇ Showroom_Name VARCHAR(20)
- ◇ No_of_employees INT(11)
- ● fk_company_id_showroom VARCHAR(5)
- Indexes ▶

payment
- 🔑 payment_id VARCHAR(5)
- ● fk_Car_id_payment VARCHAR(5)
- ● fk_Showroom_id_payment VARCHAR(5)
- ◇ amount DOUBLE
- ◇ Pdate DATE
- Indexes ▶

5. DATABASE IMPLEMENTION

5.1 SCHEMA

1. CUSTOMER

CREATE TABLE IF NOT EXISTS `mydb`.`Customer` (

`Customer_id` VARCHAR(5) NOT NULL,

`fname` VARCHAR(15) NOT NULL,

`Lname` VARCHAR(15) NULL,

`gender` VARCHAR(15) NOT NULL,

`dob` DATE NOT NULL,

`email_id` VARCHAR(30) NOT NULL,

PRIMARY KEY (`Customer_id`))

ENGINE = InnoDB;

Table Name: customer   Schema: **myproject**

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
Customer_id	VARCHAR(5)	☑	☑	☐	☐	☐	☐	☐	☐	
fname	VARCHAR(15)	☐	☑	☐	☐	☐	☐	☐	☐	
Lname	VARCHAR(15)	☐	☑	☐	☐	☐	☐	☐	☐	
gender	VARCHAR(15)	☐	☑	☐	☐	☐	☐	☐	☐	
dob	DATE	☐	☑	☐	☐	☐	☐	☐	☐	
email_id	VARCHAR(30)	☐	☑	☐	☐	☐	☐	☐	☐	
Age	INT(11)	☐	☑	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	

2. MANUFACTURER

```
CREATE TABLE IF NOT EXISTS `mydb`.`Manufacturer` (
  `Manufacturer_id` VARCHAR(5) NOT NULL,
  `Manufacturer_Name` VARCHAR(20) NULL,
  PRIMARY KEY (`Manufacturer_id`))
  ENGINE = InnoDB
```

Table Name: manufacturer   Schema: **myproject**

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
Manufacturer_id	VARCHAR(5)	☑	☑	☐	☐	☐	☐	☐	☐	
Manufacturer_Name	VARCHAR(20)	☐	☑	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	

3. CAR_ COMPANY

```
CREATE TABLE IF NOT EXISTS `mydb`.`Car_Company` (
  `company_id` VARCHAR(5) NOT NULL,
  `Company name` VARCHAR(15) NULL,
  `No_of_employees` INT NULL,
  `fk_Manufacture_id_company` VARCHAR(5) NOT NULL,
  PRIMARY KEY (`company_id`),
  INDEX `fk_Car_Company_Manufacture1_idx`
(`fk_Manufacture_id_company` ASC),
  CONSTRAINT `fk Manufacturer id company`
    FOREIGN KEY (`fk_Manufacture_id_company`)
    REFERENCES `mydb`.`Manufacturer` (`Manufacturer_id`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;
```

Table Name: car_company   Schema: **myproject**

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
company_id	VARCHAR(5)	☑	☑	☐	☐	☐	☐	☐	☐	
Company_name	VARCHAR(15)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
No_of_employees	INT(11)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
fk_Manufacture_id_company	VARCHAR(5)	☐	☑	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	

4. SHOWROOM

```
CREATE TABLE IF NOT EXISTS `mydb`.`Showroom` (
 `Showroom_id` VARCHAR(5) NOT NULL,
 `Showroom_Name` VARCHAR(20) NULL,
 `No_of_employees` INT NULL,
 `fk_company_id_showroom` VARCHAR(5) NOT NULL,
 PRIMARY KEY (`Showroom_id`),
 INDEX `fk_Showroom_Car_Company1_idx` (`fk_company_id_showroom` ASC),
 CONSTRAINT `fk_company_id_showroom`
  FOREIGN KEY (`fk_company_id_showroom`)
  REFERENCES `mydb`.`Car_Company` (`company_id`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION)
```

ENGINE = InnoDB;

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
Showroom_id	VARCHAR(5)	☑	☑	☐	☐	☐	☐	☐	☐	
Showroom_Name	VARCHAR(20)	☐	☑	☐	☐	☐	☐	☐	☐	
No_of_employees	INT(11)	☐	☑	☐	☐	☐	☐	☐	☐	
fk_company_id_showroom	VARCHAR(5)	☐	☑	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	

Table Name: showroom   Schema: **myproject**

5. ADDRESS

CREATE TABLE IF NOT EXISTS `mydb`.`address` (

`zip_code` INT NOT NULL,

`street_address` VARCHAR(45) NOT NULL,

`city` VARCHAR(15) NOT NULL,

`state` VARCHAR(15) NOT NULL,

`country` VARCHAR(15) NOT NULL,

`fk_Customer_id_address` VARCHAR(5) NULL,

`fk_Manufacturer_id_address` VARCHAR(5) NULL,

`Showroom_Showroom_id` VARCHAR(5) NULL,

INDEX `fk_address_Customer1_idx` (`fk_Customer_id_address` ASC),

INDEX `fk_address_Manufacturer1_idx` (`fk_Manufacturer_id_address` ASC),

INDEX `fk_address_Showroom1_idx` (`Showroom_Showroom_id` ASC),

CONSTRAINT `fk_Customer_id_addess`

FOREIGN KEY (`fk_Customer_id_address`)

REFERENCES `mydb`.`Customer` (`Customer_id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `fk_Manufacturer_id_address`

FOREIGN KEY (`fk_Manufacturer_id_address`)

REFERENCES `mydb`.`Manufacturer` (`Manufacturer_id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `fk_address_Showroom1`

    FOREIGN KEY (`Showroom_Showroom_id`)

    REFERENCES `mydb`.`Showroom` (`Showroom_id`)

    ON DELETE NO ACTION

    ON UPDATE NO ACTION)

ENGINE = InnoDB;

Table Name:	address										Schema:	**myproject**
Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression		
zip_code	INT(11)	☐	☑	☐	☐	☐	☐	☐	☐			
street_address	VARCHAR(45)	☐	☑	☐	☐	☐	☐	☐	☐			
city	VARCHAR(15)	☐	☑	☐	☐	☐	☐	☐	☐			
state	VARCHAR(15)	☐	☑	☐	☐	☐	☐	☐	☐			
country	VARCHAR(15)	☐	☑	☐	☐	☐	☐	☐	☐			
fk_Customer_id_address	VARCHAR(5)	☐	☐	☐	☐	☐	☐	☐	☐	NULL		
fk_Manufacturer_id_address	VARCHAR(5)	☐	☐	☐	☐	☐	☐	☐	☐	NULL		
Showroom_Showroom_id	VARCHAR(5)	☐	☐	☐	☐	☐	☐	☐	☐	NULL		
		☐	☐	☐	☐	☐	☐	☐	☐			

6. PHONE_NUMBER

CREATE TABLE IF NOT EXISTS `mydb`.`phone_number` (

  `phone_no` BIGINT(10) NOT NULL,

  `Country_code` INT(2) NOT NULL,

  `fk_Customer_id_phone` VARCHAR(5) NOT NULL,

  CONSTRAINT `Custome_id`

    FOREIGN KEY (`fk_Customer_id_phone`)

    REFERENCES `mydb`.`Customer` (`Customer_id`)

    ON DELETE NO ACTION

    ON UPDATE NO ACTION)

ENGINE = InnoDB;
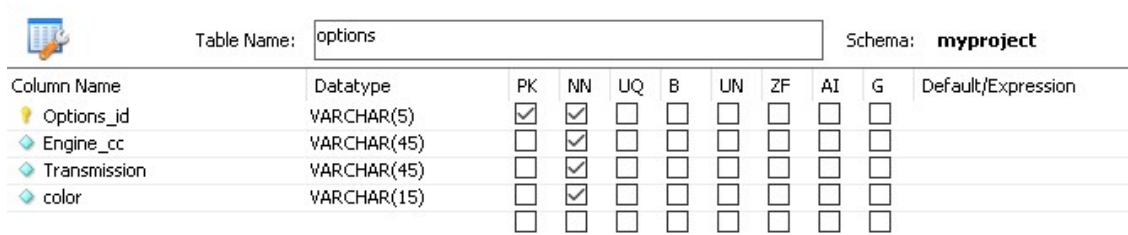
Table Name:	phone_number										Schema:	**myproject**
Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression		
phone_no	BIGINT(10)	☐	☑	☐	☐	☐	☐	☐	☐			
Country_code	INT(2)	☐	☑	☐	☐	☐	☐	☐	☐			
fk_Customer_id_phone	VARCHAR(5)	☐	☑	☐	☐	☐	☐	☐	☐			
		☐	☐	☐	☐	☐	☐	☐	☐			

7. OPTION

CREATE TABLE IF NOT EXISTS `mydb`.`Options` (

 `Options_id` VARCHAR(5) NOT NULL,

 `Engine` VARCHAR(45) NOT NULL,

 `Transmission` VARCHAR(45) NOT NULL,

 `color` VARCHAR(15) NOT NULL,

 PRIMARY KEY (`Options_id`))

ENGINE = InnoDB;

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
Options_id	VARCHAR(5)	☑	☑	☐	☐	☐	☐	☐	☐	
Engine_cc	VARCHAR(45)	☐	☑	☐	☐	☐	☐	☐	☐	
Transmission	VARCHAR(45)	☐	☑	☐	☐	☐	☐	☐	☐	
color	VARCHAR(15)	☐	☑	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	

Table Name: options   Schema: **myproject**

8. CAR_MODEL

CREATE TABLE IF NOT EXISTS `mydb`.`Car_Model` (

 `Model_Year` DOUBLE NOT NULL,

 `model_id` VARCHAR(5) NOT NULL,

 `model_name` VARCHAR(15) NULL,

 `availability` VARCHAR(15) NULL,

 `Base_price` DOUBLE NULL,

 `fk_company_id_model` VARCHAR(5) NOT NULL,

 PRIMARY KEY (`model_id`),

 INDEX `fk_Car Model_Car_Company1_idx` (`fk_company_id_model` ASC),

 CONSTRAINT `fk_Car Model_Car_Company`

  FOREIGN KEY (`fk_company_id_model`)

  REFERENCES `mydb`.`Car_Company` (`company_id`)

  ON DELETE NO ACTION

  ON UPDATE NO ACTION)

ENGINE = InnoDB;

Table Name: car_model   Schema: **myproject**

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
Model_Year	DOUBLE	☐	☑	☐	☐	☐	☐	☐	☐	
model_id	VARCHAR(5)	☑	☑	☐	☐	☐	☐	☐	☐	
model_name	VARCHAR(15)	☐	☑	☐	☐	☐	☐	☐	☐	
availability	VARCHAR(15)	☐	☑	☐	☐	☐	☐	☐	☐	
Base_price	DOUBLE	☐	☑	☐	☐	☐	☐	☐	☐	
fk_company_id_model	VARCHAR(5)	☐	☑	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	

9. CAR

```
CREATE TABLE IF NOT EXISTS `mydb`.`CAR` (
 `CAR_id` VARCHAR(5) NOT NULL,
 `fk_option_id_car` VARCHAR(5) NOT NULL,
 `fk_customer_id_car` VARCHAR(5) NOT NULL,
 `fk_model_id_car` VARCHAR(5) NOT NULL,
 PRIMARY KEY (`CAR_id`),
 INDEX `fk_CAR_Options1_idx` (`fk_option_id_car` ASC),
 INDEX `fk_CAR_Customer1_idx` (`fk_customer_id_car` ASC),
 INDEX `fk_CAR_Car Model1_idx` (`fk_model_id_car` ASC),
 CONSTRAINT `fk_Options_id_car`
  FOREIGN KEY (`fk_option_id_car`)
  REFERENCES `mydb`.`Options` (`Options_id`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
 CONSTRAINT `fk_customer_id_car`
  FOREIGN KEY (`fk_customer_id_car`)
  REFERENCES `mydb`.`Customer` (`Customer_id`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
 CONSTRAINT `fk_model_id_car`
  FOREIGN KEY (`fk_model_id_car`)
  REFERENCES `mydb`.`Car_Model` (`model_id`)
```

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
CAR_id	VARCHAR(5)	☑	☑	☐	☐	☐	☐	☐	☐	
fk_option_id_car	VARCHAR(5)	☐	☑	☐	☐	☐	☐	☐	☐	
fk_customer_id_car	VARCHAR(5)	☐	☑	☐	☐	☐	☐	☐	☐	
fk_model_id_car	VARCHAR(5)	☐	☑	☐	☐	☐	☐	☐	☐	
ddate	DATE	☐	☐	☐	☐	☐	☐	☐	☐	NULL
		☐	☐	☐	☐	☐	☐	☐	☐	

Table Name: car   Schema: **myproject**

10. PAYMENT

CREATE TABLE IF NOT EXISTS `mydb`.`payment` (

 `payment_id` VARCHAR(5) NOT NULL,

 `fk_Car_id_payment` VARCHAR(5) NOT NULL,

 `fk_Showroom_id_payment` VARCHAR(5) NOT NULL,

 `fk_Customer_id_payment` VARCHAR(5) NOT NULL,

 `amount` REAL NOT NULL,

 `Pdate` DATE NOT NULL,

 PRIMARY KEY (`payment_id`),

 INDEX `CAR_id_idx` (`fk_Car_id_payment` ASC),

 INDEX `fk_payment_Showroom1_idx` (`fk_Showroom_id_payment` ASC),

 INDEX `fk_payment_Customer1_idx` (`fk_Customer_id_payment` ASC),

 CONSTRAINT `fk_patment_car1`

  FOREIGN KEY (`fk_Car_id_payment`)

  REFERENCES `mydb`.`CAR` (`CAR_id`)

  ON DELETE NO ACTION

  ON UPDATE NO ACTION,

 CONSTRAINT `fk_payment_Showroom1`

  FOREIGN KEY (`fk_Showroom_id_payment`)

  REFERENCES `mydb`.`Showroom` (`Showroom_id`)

   ON DELETE NO ACTION

   ON UPDATE NO ACTION,

 CONSTRAINT `fk_payment_Customer1`

   FOREIGN KEY (`fk_Customer_id_payment`)

   REFERENCES `mydb`.`Customer` (`Customer_id`)

   ON DELETE NO ACTION

   ON UPDATE NO ACTION)

ENGINE = InnoDB;

Table Name:	payment									Schema:	**myproject**

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
payment_id	VARCHAR(5)	☑	☑	☐	☐	☐	☐	☐	☐	
fk_Car_id_payment	VARCHAR(5)	☐	☑	☐	☐	☐	☐	☐	☐	
fk_Showroom_id_payment	VARCHAR(5)	☐	☑	☐	☐	☐	☐	☐	☐	
amount	DOUBLE	☐	☑	☐	☐	☐	☐	☐	☐	
Pdate	DATE	☐	☑	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	

5.2 INSERT DATA VALUES

1. CAR

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US001', 'o013', 'c013', 'i013');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US002', 'o012', 'c012', 'i012');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US003', 'o001', 'c001', 'i001');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US004', 'o002', 'c002', 'i002');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US005', 'o003', 'c003', 'i003');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US006', 'o004', 'c004', 'i004');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US007', 'o005', 'c005', 'i005');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US008', 'o006', 'c006', 'i006');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US009', 'o007', 'c007', 'i007');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US010', 'o008', 'c008', 'i008');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US011', 'o009', 'c009', 'i009');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US012', 'o010', 'c010', 'i010');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US013', 'o011', 'c011', 'i011');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US014', 'o014', 'c014', 'i014');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US015', 'o015', 'c015', 'i015');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US016', 'o016', 'c016', 'i016');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US017', 'o017', 'c017', 'i017');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US018', 'o018', 'c018', 'i018');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US019', 'o009', 'c019', 'i019');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US020', 'o012', 'c020', 'i020');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US021', 'o014', 'c021', 'i021');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US022', 'o002', 'c022', 'i022');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US023', 'o011', 'c023', 'i023');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US024', 'o015', 'c024', 'i024');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US025', 'o017', 'c025', 'i025');

insert into CAR (CAR_id, fk_option_id_car, fk_customer_id_car, fk_model_id_car) values ('US026', 'o018', 'c026', 'i026');

CAR_id	fk_option_id_car	fk_customer_id_car	fk_model_id_car	ddate
US001	o013	c013	i013	2014-04-30
US002	o012	c012	i012	2015-04-30
US003	o001	c001	i001	2015-05-12
US004	o002	c002	i002	2015-06-12
US005	o003	c003	i003	2016-08-12
US006	o004	c004	i004	2017-09-12
US007	o005	c005	i005	2011-10-12
US008	o006	c006	i006	2012-11-12
US009	o007	c007	i007	2013-12-12
US010	o008	c008	i008	2014-01-12
US011	o009	c009	i009	2015-02-12
US012	o010	c010	i010	2015-03-12
US013	o011	c011	i011	2016-04-12
US014	o016	c016	i016	2012-05-12
US015	o015	c015	i015	2013-06-12
US016	o014	c014	i014	2006-07-12
US017	o017	c017	i017	2013-08-12
US018	o018	c018	i018	2013-08-12
US019	o009	c019	i019	2014-09-12

2. CAR_MODEL

```
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2015, 'i001', 'Model-3', 'available', 36000, 'n001');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2012, 'i002', 'Model-s', 'available', 68000, 'n001');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2014, 'i003', 'Model-x', 'available', 55567, 'n001');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (1996, 'i004', 'Mustang', 'available', 178766, 'n002');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (1999, 'i005', 'Eco-sport', 'available', 34184, 'n002');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (1994, 'i006', 'Aspire', 'Not-available', 15023, 'n002');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2007, 'i007', 'Ferrari-488', 'available', 95663, 'n003');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2005, 'i008', 'Ferrari-812', 'available', 90446, 'n003');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (1967, 'i009', 'Elantra', 'available', 23023, 'n004');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (1986, 'i010', 'Tucson', 'available',53894, 'n004');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (1985, 'i011', 'RDX', 'available', 35643, 'n005');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (1994, 'i012', 'ILX', 'available', 95427, 'n005');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2002, 'i013', 'A6', 'available', 52742, 'n007');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (1959, 'i014', 'R8', 'available', 194000, 'n007');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2007, 'i015', 'Duster', 'available', 58000, 'n006');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2004, 'i016', 'Captur', 'Not-available', 64000, 'n006');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2002, 'i017', 'X5', 'Not-available', 74000, 'n008');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2010, 'i018', 'i8', 'available', 85000, 'n008');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2004, 'i019', 'Accord', 'available', 56000, 'n009');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (1968, 'i020', 'CR-V', 'available', 77000, 'n009');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2005, 'i021', 'Mulsanne', 'available', 87000, 'n010');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2006, 'i022', 'Bentayga', 'available', 76000, 'n010');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2007, 'i023', 'Prius', 'available', 86000, 'n011');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2003, 'i024', 'Camry', 'available', 46000, 'n011');
```

```
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2005, 'i025', 'RX', 'available', 76000, 'n012');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2006, 'i026', 'L5', 'available', 96000, 'n012');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2012, 'i027', 'Aventador', 'available', 276000, 'n013');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2016, 'i028', 'Huracan', 'available', 300000, 'n013');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2001, 'i029', 'Phantom', 'available', 350000, 'n014');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2013, 'i030', 'Ghost', 'available', 256000, 'n014');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2008, 'i031', 'Range-Rover', 'available', 46000,
'n015');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2009, 'i032', 'Discovery', 'available', 62000, 'n015');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2006, 'i033', 'A-Class', 'available', 108000, 'n016');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2009, 'i034', 'GLS', 'available', 150000, 'n016');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2010, 'i035', 'XJ', 'available', 76000, 'n017');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2011, 'i036', 'XF', 'available', 95000, 'n017');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2002, 'i037', '911', 'Not-available', 176000, 'n018');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2004, 'i038', 'Panamera', 'available', 200000, 'n018');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2008, 'i039', 'Veyron', 'available', 350000, 'n019');
insert into Car_Model (Model_Year, model_id, model_name, availability, Base_price,
fk_company_id_model) values (2016, 'i040', 'Chiron', 'available', 450000,'n019');
```

Model_Year	model_id	model_name	availability	Base_price	fk_company_id_model
2015	i001	Model-3	available	36000	n001
2012	i002	Model-s	available	68000	n001
2014	i003	Model-x	available	55567	n001
1996	i004	Mustang	available	178766	n002
1999	i005	Eco-sport	available	34184	n002
1994	i006	Aspire	Not-available	15023	n002
2007	i007	Ferrari-488	available	95663	n003
2005	i008	Ferrari-812	available	90446	n003
1967	i009	Elantra	available	23023	n004
1986	i010	Tucson	available	53894	n004
1985	i011	RDX	not available	35643	n005
1994	i012	ILX	available	95427	n005
2002	i013	A6	available	52742	n007
1959	i014	R8	available	194000	n007
2007	i015	Duster	available	58000	n006
2004	i016	Captur	Not-available	64000	n006
2002	i017	X5	Not-available	74000	n008
2010	i018	i8	available	85000	n008
2004	i019	Accord	available	56000	n009
1968	i020	CR-V	available	77000	n009
2005	i021	Mulsanne	available	87000	n010
2006	i022	Bentayga	available	76000	n010

3. CUSTOMER

insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values ('c001', 'Ev', 'Becerro', 'Male', '1983-10-29', 'ebececustomercustomerrro0@tuttocitta.it');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values ('c002', 'Celestyn', 'Malling', 'Female', '1972-03-03', 'cmalling1@cbslocal.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values ('c003', 'Katey', 'Gentreau', 'Female', '1996-08-07', 'kgentreau2@narod.ru');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values ('c004', 'Brody', 'Piburn', 'Male', '1978-10-07', 'bpiburn3@cnet.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values ('c005', 'Codie', 'Noteyoung', 'Male', '1998-08-03', 'cnoteyoung4@moonfruit.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values ('c006', 'Yorke', 'Ybarra', 'Male', '1983-07-02', 'yybarra5@wikimedia.org');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values ('c007', 'Lyn', 'Vasnev', 'Female', '1980-01-26', 'lvasnev6@washingtonpost.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values ('c008', 'Stafani', 'Atherley', 'Female', '1974-09-17', 'satherley7@nsw.gov.au');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values ('c009', 'Quinlan', 'Stuckow', 'Male', '1983-03-04', 'qstuckow8@tiny.cc');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values ('c010', 'Lance', 'Hallward', 'Male', '1967-02-03', 'lhallward9@etsy.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values ('c011', 'Stoddard', 'Jansie', 'Female', '1992-12-29', 'sjansiea@comsenz.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values ('c012', 'Jennee', 'Carncross', 'Female', '1997-03-17', 'jcarncrossb@ca.gov');

```
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c013', 'Cesar', 'Lanney', 'Male', '1982-08-26', 'clanneyc@blinklist.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c014', 'Linnell', 'Baroch', 'Female', '1993-02-05', 'lbarochd@timesonline.co.uk');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c015', 'Barb', 'Stansfield', 'Female', '1965-06-16', 'bstansfielde@ow.ly');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c016', 'Dore', 'Mace', 'Male', '1964-10-07', 'dmacef@bigcartel.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c017', 'Lazar', 'Hubbock', 'Male', '1962-03-20', 'lhubbockg@stumbleupon.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c018', 'Ravi', 'Basilone', 'Male', '1990-04-20', 'rbasiloneh@deliciousdays.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c019', 'Maudie', 'Lambdon', 'Female', '1991-06-17', 'mlambdoni@angelfire.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c020', 'Edythe', 'Dallman', 'Female', '1972-09-15', 'edallmanj@ustream.tv');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c021', 'Honey', 'Hallut', 'Female', '1991-02-18', 'hhallutk@bbc.co.uk');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c022', 'Nils', 'Vamplus', 'Male', '1977-12-06', 'nvamplusl@webeden.co.uk');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c023', 'Joan', 'de la Tremoille', 'Female', '1985-10-19',
'jdelatremoillem@mashable.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c024', 'Quintana', 'Menendes', 'Female', '1977-03-18', 'qmenendesn@xing.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c025', 'Care', 'Dundridge', 'Male', '1964-05-13', 'cdundridgeo@macromedia.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c026', 'Ira', 'Farmery', 'Female', '1975-06-26', 'ifarmeryp@domainmarket.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c027', 'Lovell', 'Master', 'Male', '1972-06-07', 'lmasterq@technorati.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c028', 'Xylia', 'Grayham', 'Female', '1991-04-11', 'xgrayhamr@ocn.ne.jp');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c029', 'Emogene', 'Flippen', 'Female', '1994-11-16', 'eflippens@mediafire.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c030', 'Maible', 'Greetham', 'Female', '1974-03-14',
'mgreethamt@chronoengine.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c031', 'Abe', 'Woolgar', 'Male', '1971-11-09', 'awoolgaru@weather.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c032', 'Kore', 'Feilden', 'Female', '1975-01-02', 'kfeildenv@mysql.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c033', 'Almeda', 'Mobius', 'Female', '1975-09-30', 'amobiusw@cnet.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c034', 'Sal', 'Stowell', 'Male', '1964-02-10', 'sstowellx@cafepress.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c035', 'Mab', 'Poundesford', 'Female', '1976-09-29',
'mpoundesfordy@wikispaces.com');
```

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insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c036', 'Helaine', 'Waistell', 'Female', '1999-04-05', 'hwaistellz@google.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c037', 'Bertina', 'Crookshank', 'Female', '1998-02-13',
'bcrookshank10@trellian.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c038', 'Melinde', 'Domonkos', 'Female', '1976-02-08', 'mdomonkos11@youku.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c039', 'Anetta', 'Sunley', 'Female', '1991-06-27', 'asunley12@unc.edu');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c040', 'Clarie', 'Ferrarotti', 'Female', '1988-05-31', 'cferrarotti13@friendfeed.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c041', 'Marita', 'Kaufman', 'Female', '1963-06-23', 'mkaufman14@51.la');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c042', 'Vlad', 'Oxe', 'Male', '1994-10-09', 'voxe15@time.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c043', 'Mahalia', 'Thorp', 'Female', '1982-11-08', 'mthorp16@hugedomains.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c044', 'Creight', 'Creber', 'Male', '1976-08-19', 'ccreber17@gizmodo.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c045', 'Griff', 'Chew', 'Male', '1970-06-20', 'gchew18@shinystat.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c046', 'Skip', 'Angric', 'Male', '1991-08-01', 'sangric19@amazon.co.uk');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c047', 'Ertha', 'Beldam', 'Female', '1994-07-09', 'ebeldam1a@alexa.com');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c048', 'Selestina', 'Keiley', 'Female', '1984-07-09', 'skeiley1b@nasa.gov');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c049', 'Aristotle', 'Churchlow', 'Male', '1989-06-28', 'achurchlow1c@rambler.ru');
insert into Customer (Customer_id, fname, Lname, gender, dob, email_id) values
('c050', 'Daryl', 'Cruttenden', 'Female', '1994-08-28', 'dcruttenden1d@youtu.be');
```

Customer_id	fname	Lname	gender	dob	email_id	Age
c006	Yorke	Ybarra	Male	1983-07-02	yybarra5@wikimedia.org	0
c007	Lyn	Vasnev	Female	1980-01-26	lvasnev6@washingtonpost.com	0
c008	Stafani	Atherley	Female	1974-09-17	satherley7@nsw.gov.au	0
c009	Quinlan	Stuckow	Male	1983-03-04	qstuckow8@tiny.cc	0
c010	Lance	Hallward	Male	1967-02-03	lhallward9@etsy.com	0
c011	Stoddard	Jansie	Female	1992-12-29	sjansiea@comsenz.com	0
c012	Jennee	Carncross	Female	1997-03-17	jcarncrossb@ca.gov	0
c013	Cesar	Lannev	Male	1982-08-26	clannevc@blinklist.com	0
c014	Linnell	Baroch	Female	1993-02-05	lbarochd@timesonline.co.uk	0
c015	Barb	Stansfield	Female	1965-06-16	bstansfielde@ow.ly	0
c016	Dore	Mace	Male	1964-10-07	dmacef@biacartel.com	0
c017	Lazar	Hubbock	Male	1962-03-20	lhubbockg@stumbleupon.com	0
c018	Ravi	Basilone	Male	1990-04-20	rbasiloneh@deliciousdays.com	0
c019	Maudie	Lambdon	Female	1991-06-17	mlambdoni@angelfire.com	0
c020	Edythe	Dallman	Female	1972-09-15	edallmani@ustream.tv	0
c021	Honey	Hallut	Female	1991-02-18	hhallutk@bbc.co.uk	0
c022	Nils	Vamplus	Male	1977-12-06	nvamplusl@webeden.co.uk	0
c023	Joan	de la Trem…	Female	1985-10-19	jdelatremoillem@mashable.com	0
c024	Quintana	Menendes	Female	1977-03-18	qmenendesn@xing.com	0
c025	Care	Dundridge	Male	1964-05-13	cdundridgeo@macromedia.com	0
c026	Ira	Farmery	Female	1975-06-26	ifarmeryp@domainmarket.com	0
c027	Udeet	Patel	Male	1999-06-13	udeetpatel41@gmail.com	0
c028	Karan	Rajput	Male	1999-03-24	rklm10@gmail.com	19

4. ADDRESS

INSERT INTO `address` VALUES (22047,'0817 Fordem Trail','Falls Church','Virginia','United States','c001',NULL,NULL),(84189,'226 Paget Point','Salt Lake City','Utah','United States','c002',NULL,NULL),(48258,'70 Hanover Court','Detroit','Michigan','United States','c003',NULL,NULL),(77060,'6 Dennis Parkway','Houston','Texas','United States','c004',NULL,NULL),(46634,'91631 Crowley Lane','South Bend','Indiana','United States','c005',NULL,NULL),(7544,'23 Hanson Plaza','Paterson','New Jersey','United States','c006',NULL,NULL),(31210,'5 Northfield Avenue','Macon','Georgia','United States','c007',NULL,NULL),(48092,'883 Myrtle Plaza','Warren','Michigan','United States','c008',NULL,NULL),(97201,'5 Elmside Pass','Portland','Oregon','United States','c009',NULL,NULL),(37131,'102 Melby Way','Murfreesboro','Tennessee','United States','c010',NULL,NULL),(18505,'7 Ridgeway Way','Scranton','Pennsylvania','United States','c011',NULL,NULL),(48956,'5127 Parkside Hill','Lansing','Michigan','United States','c012',NULL,NULL),(40505,'3935 Jackson Parkway','Lexington','Kentucky','United States','c013',NULL,NULL),(67260,'8 Cordelia Terrace','Wichita','Kansas','United States','c014',NULL,NULL),(90076,'41344 Sloan Hill','Los Angeles','California','United States','c015',NULL,NULL),(21684,'3152 7th Crossing','Ridgely','Maryland','United States','c016',NULL,NULL),(10099,'30 Mallory Crossing','New York City','New York','United States','c017',NULL,NULL),(11054,'37129 Banding Center','Port Washington','New York','United States','c018',NULL,NULL),(6606,'8 Westport Terrace','Bridgeport','Connecticut','United States','c019',NULL,NULL),(94121,'9751 Oneill Street','San Francisco','California','United States','c020',NULL,NULL),(55448,'9359 Sunfield Trail','Minneapolis','Minnesota','United States','c021',NULL,NULL),(95405,'27 Florence Drive','Santa Rosa','California','United States','c022',NULL,NULL),(64179,'7241 Sullivan Trail','Kansas City','Missouri','United States','c023',NULL,NULL),(92137,'8928 Old Gate Hill','San Diego','California','United States','c024',NULL,NULL),(64149,'4 Ryan Terrace','Kansas City','Missouri','United

States','c025',NULL,NULL),(28210,'79 Hallows Pass','Charlotte','North Carolina','United States','c026',NULL,NULL),(95828,'777 Dwight Parkway','Sacramento','California','United States','c006',NULL,NULL);

zip_code	street_address	city	state	country	fk_Customer_id_address	fk_Manufacturer_id_address	Showroom_Showroo
22047	0817 Fordem Trail	Falls Church	Virginia	United States	c001	NULL	NULL
84189	226 Paget Point	Salt Lake City	Utah	United States	c002	NULL	NULL
48258	70 Hanover Court	Detroit	Michigan	United States	c003	NULL	NULL
77060	6 Dennis Parkway	Houston	Texas	United States	c004	NULL	NULL
46634	91631 Crowley Lane	South Bend	Indiana	United States	c005	NULL	NULL
7544	23 Hanson Plaza	Paterson	New Jersey	United States	c006	NULL	NULL
31210	5 Northfield Avenue	Macon	Georgia	United States	c007	NULL	NULL
48092	883 Myrtle Plaza	Warren	Michigan	United States	c008	NULL	NULL
97201	5 Elmside Pass	Portland	Oregon	United States	c009	NULL	NULL
37131	102 Melby Way	Murfreesboro	Tennessee	United States	c010	NULL	NULL
18505	7 Ridgeway Way	Scranton	Pennsylvania	United States	c011	NULL	NULL
48956	5127 Parkside Hill	Lansing	Michigan	United States	c012	NULL	NULL
40505	3935 Jackson Park	Lexington	Kentucky	United States	c013	NULL	NULL
67260	8 Cordelia Terrace	Wichita	Kansas	United States	c014	NULL	NULL
90076	41344 Sloan Hill	Los Angeles	California	United States	c015	NULL	NULL
21684	3152 7th Crossing	Ridgely	Maryland	United States	c016	NULL	NULL
10099	30 Mallory Crossing	New York City	New York	United States	c017	NULL	NULL
11054	37129 Banding Center	Port Washin...	New York	United States	c018	NULL	NULL
6606	8 Westport Terrace	Bridgeport	Connecticut	United States	c019	NULL	NULL
94121	9751 Oneill Street	San Francisco	California	United States	c020	NULL	NULL
55448	9359 Sunfield Trail	Minneapolis	Minnesota	United States	c021	NULL	NULL
95405	27 Florence Drive	Santa Rosa	California	United States	c022	NULL	NULL
64179	7241 Sullivan Trail	Kansas City	Missouri	United States	c023	NULL	NULL

5. CAR_COMPANY

insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n001', 'Tesla', 450000, 'm001');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n002', 'Ford',540000 , 'm003');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n003', 'Ferrari',620000 , 'm004');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n004', 'Hyundai', 380000, 'm009');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n005', 'Acura', 190000, 'm002');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n006', 'Renault',1000000 , 'm010');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n007', 'Audi', 609040, 'm006');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n008', 'BMW', 604943, 'm008');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n009', 'Honda',794029 , 'm002');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n010', 'Bently',309484 , 'm006');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n011', 'Toyota',673563 , 'm005');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n012', 'Lexus',209374 , 'm005');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n013', 'Lamborghini',309484 , 'm006');

insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n014', 'Rolls-Royce', 202848, 'm008');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n015', 'Land-Rover', 302398, 'm007');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n016', 'Mercedes-Benz', 203845, 'm011');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n017', 'Jaguar', 293858, 'm007');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n018', 'Porsche',483902 , 'm006');
insert into Car_Company (company_id, company_Name, No_of_employees, fk_Manufacture_id_company) values ('n019', 'Bugatti',473847 , 'm006');

company_id	Company_name	No_of_employees	fk_Manufacture_id_company
n001	Tesla	450000	m001
n002	Ford	540000	m003
n003	Ferrari	620000	m004
n004	Hyundai	380000	m009
n005	Acura	190000	m002
n006	Renault	100000	m010
n007	Audi	609040	m006
n008	BMW	604943	m008
n009	Honda	794029	m002
n010	Bently	309484	m006
n011	Toyota	673563	m005
n012	Lexus	209374	m005
n013	Lamborghini	309484	m006
n014	Rolls-Royce	202848	m008
n015	Land-Rover	302398	m007
n016	Mercedes-Benz	203845	m011
n017	Jaguar	293858	m007
n018	Porsche	483902	m006
n019	Bugatti	473847	m006
NULL	NULL	NULL	NULL

6. **SHOWROOM**

insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s001', 'Walker-Tesla', 141, 'n001');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s002', 'Harber-Ford', 133, 'n002');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s003', 'Wayne-ferrari', 169, 'n003');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s004', 'Hill-Hyundai', 152, 'n004');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s005', 'Zanith-Acura', 171, 'n005');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s006', 'Schulist-Renault', 123, 'n006');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s007', 'Ziemann-Audi', 297, 'n007');

insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s008', 'Bins-BMW', 229, 'n008');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s009', 'Parker-Honda', 189, 'n009');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s010', 'Hermiston-bently', 167, 'n010');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s011', 'Leannon-Toyota', 138, 'n011');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s012', 'Lebsack-Lexus', 165, 'n012');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s013', 'Olson-Lamborghini', 208, 'n013');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s014', 'Pagac-rolls_Royce', 126, 'n014');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s015', 'kovic-Land_Rover', 205, 'n015');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s016', 'Kautzer-Mercedes', 160, 'n016');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s017', 'Bradtke-porsche', 184, 'n018');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s018', 'Ziemann-Jaguar', 131, 'n017');
insert into showroom (Showroom_id, Showroom_Name, No_of_employees, fk_company_id_showroom) values ('s019', 'One-Bugatti', 211, 'n019');

zip_code	street_address	city	state	country	fk_Customer_id_address	fk_Manufacturer_id_address	Showroom_Showroo
22047	0817 Fordem Trail	Falls Church	Virginia	United States	c001	NULL	NULL
84189	226 Paget Point	Salt Lake City	Utah	United States	c002	NULL	NULL
48258	70 Hanover Court	Detroit	Michigan	United States	c003	NULL	NULL
77060	6 Dennis Parkway	Houston	Texas	United States	c004	NULL	NULL
46634	91631 Crowley Lane	South Bend	Indiana	United States	c005	NULL	NULL
7544	23 Hanson Plaza	Paterson	New Jersey	United States	c006	NULL	NULL
31210	5 Northfield Avenue	Macon	Georgia	United States	c007	NULL	NULL
48092	883 Myrtle Plaza	Warren	Michigan	United States	c008	NULL	NULL
97201	5 Elmside Pass	Portland	Oregon	United States	c009	NULL	NULL
37131	102 Melby Way	Murfreesboro	Tennessee	United States	c010	NULL	NULL
18505	7 Ridgeway Way	Scranton	Pennsylvania	United States	c011	NULL	NULL
48956	5127 Parkside Hill	Lansing	Michigan	United States	c012	NULL	NULL
40505	3935 Jackson Park	Lexington	Kentucky	United States	c013	NULL	NULL
67260	8 Cordelia Terrace	Wichita	Kansas	United States	c014	NULL	NULL
90076	41344 Sloan Hill	Los Angeles	California	United States	c015	NULL	NULL
21684	3152 7th Crossing	Ridgely	Maryland	United States	c016	NULL	NULL
10099	30 Mallory Crossing	New York City	New York	United States	c017	NULL	NULL
11054	37129 Banding Center	Port Washin...	New York	United States	c018	NULL	NULL
6606	8 Westport Terrace	Bridgeport	Connecticut	United States	c019	NULL	NULL
94121	9751 Oneill Street	San Francisco	California	United States	c020	NULL	NULL
55448	9359 Sunfield Trail	Minneapolis	Minnesota	United States	c021	NULL	NULL
95405	27 Florence Drive	Santa Rosa	California	United States	c022	NULL	NULL
64179	7241 Sullivan Trail	Kansas City	Missouri	United States	c023	NULL	NULL

7. PHONE_NUMBER

insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values ('3103934636', '1', 'c001');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values ('3616605216', '1', 'c002');

```
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('4781657218', '1', 'c003');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('5593418042', '1', 'c004');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('6615896298', '1', 'c005');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('9159596213', '1', 'c006');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('3144024305', '1', 'c007');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('7045999576', '1', 'c008');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('5136475149', '1', 'c009');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('7206705130', '1', 'c010');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('7174576475', '1', 'c011');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('6027388543', '1', 'c012');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('6164229226', '1', 'c013');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('7025294353', '1', 'c014');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('5711802771', '1', 'c015');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('4158479216', '1', 'c016');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('7178123006', '1', 'c017');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('6174568984', '1', 'c018');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('6024307723', '1', 'c019');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('2603689623', '1', 'c020');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('6123506399', '1', 'c021');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('2026474684', '1', 'c022');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('2566129502', '1', 'c023');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('8033845425', '1', 'c024');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('4138583184', '1', 'c025');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('6162635620', '1', 'c026');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('8133118143', '1', 'c027');
```

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insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('4194087037', '1', 'c028');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('6507969850', '1', 'c029');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('4027662559', '1', 'c030');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('5125074772', '1', 'c031');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('2814810508', '1', 'c032');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('7706884608', '1', 'c033');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('5717413617', '1', 'c034');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('7759979037', '1', 'c035');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('9045713807', '1', 'c036');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('5178757908', '1', 'c037');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('4074382777', '1', 'c038');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('9529584869', '1', 'c039');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('9728590296', '1', 'c040');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('4231887481', '1', 'c041');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('2149876632', '1', 'c042');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('2026976826', '1', 'c043');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('5596423238', '1', 'c044');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('5157722861', '1', 'c045');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('2146200688', '1', 'c046');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('8607933175', '1', 'c047');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('5169846277', '1', 'c048');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('7171145144', '1', 'c049');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('9017839512', '1', 'c050');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('9498607960', '1', 'c031');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values
('8123036221', '1', 'c002');
```

insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values ('4058598432', '1', 'c003');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values ('7021681921', '1', 'c023');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values ('5104523223', '1', 'c045');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values ('5714606608', '1', 'c016');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values ('2138791050', '1', 'c037');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values ('2141046621', '1', 'c048');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values ('6783903601', '1', 'c019');
insert into phone_number (phone_no, Country_code, fk_Customer_id_phone) values ('3171489617', '1', 'c020');

zip_code	street_address	city	state	country	fk_Customer_id_address	fk_Manufacturer_id_address	Showroom_Showroo
22047	0817 Fordem Trail	Falls Church	Virginia	United States	c001	NULL	NULL
84189	226 Paget Point	Salt Lake City	Utah	United States	c002	NULL	NULL
48258	70 Hanover Court	Detroit	Michigan	United States	c003	NULL	NULL
77060	6 Dennis Parkway	Houston	Texas	United States	c004	NULL	NULL
46634	91631 Crowley Lane	South Bend	Indiana	United States	c005	NULL	NULL
7544	23 Hanson Plaza	Paterson	New Jersey	United States	c006	NULL	NULL
31210	5 Northfield Avenue	Macon	Georgia	United States	c007	NULL	NULL
48092	883 Myrtle Plaza	Warren	Michigan	United States	c008	NULL	NULL
97201	5 Elmside Pass	Portland	Oregon	United States	c009	NULL	NULL
37131	102 Melby Way	Murfreesboro	Tennessee	United States	c010	NULL	NULL
18505	7 Ridgeway Way	Scranton	Pennsylvania	United States	c011	NULL	NULL
48956	5127 Parkside Hill	Lansing	Michigan	United States	c012	NULL	NULL
40505	3935 Jackson Park	Lexington	Kentucky	United States	c013	NULL	NULL
67260	8 Cordelia Terrace	Wichita	Kansas	United States	c014	NULL	NULL
90076	41344 Sloan Hill	Los Angeles	California	United States	c015	NULL	NULL
21684	3152 7th Crossing	Ridgely	Maryland	United States	c016	NULL	NULL
10099	30 Mallory Crossing	New York City	New York	United States	c017	NULL	NULL
11054	37129 Banding Center	Port Washin…	New York	United States	c018	NULL	NULL
6606	8 Westport Terrace	Bridgeport	Connecticut	United States	c019	NULL	NULL
94121	9751 Oneill Street	San Francisco	California	United States	c020	NULL	NULL
55448	9359 Sunfield Trail	Minneapolis	Minnesota	United States	c021	NULL	NULL
95405	27 Florence Drive	Santa Rosa	California	United States	c022	NULL	NULL
64179	7241 Sullivan Trail	Kansas City	Missouri	United States	c023	NULL	NULL

8. PAYMENT

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p001', 'US001', 's007', 5234.35, '2015-09-24');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p002', 'US002', 's005', 7199.38, '2016-07-20');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p003', 'US003', 's001', 5789.75, '2018-08-21');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p004', 'US004', 's001', 1666.46, '2017-12-25');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p005', 'US005', 's001', 1566.05, '2017-01-06');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p006', 'US006', 's002', 8821.68, '2016-04-16');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p007', 'US007', 's002', 3438.57, '2016-08-12');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p008', 'US008', 's002', 7301.85, '2017-03-24');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p009', 'US009', 's003', 5000 , '2017-05-05');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p010', 'US010', 's003', 9574.15, '2017-03-28');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p011', 'US011', 's004', 5244.36, '2017-08-31');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p012', 'US012', 's004', 6188.12, '2017-12-26');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p013', 'US013', 's005', 2384.44, '2017-06-24');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p014', 'US014', 's006', 9451.27, '2016-02-22');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p015', 'US015', 's006', 6739.52, '2018-03-12');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p016', 'US016', 's007', 6466.03, '2017-06-19');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p017', 'US017', 's008', 9290.05, '2018-01-30');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p018', 'US018', 's008', 9781.85, '2018-04-21');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p019', 'US019', 's009', 2156.28, '2018-09-14');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p020', 'US020', 's009', 4533.99, '2016-05-06');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p021', 'US021', 's010', 7035.33, '2016-02-14');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p022', 'US022', 's010', 8939.39, '2016-01-23');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p023', 'US023', 's011', 6703.23, '2017-01-18');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p024', 'US024', 's011', 1932.38, '2017-07-31');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p025', 'US025', 's012', 5935.02, '2017-02-10');

insert into payment (payment_id, fk_Car_id_payment, fk_Showroom_id_payment, amount, Pdate) values ('p026', 'US026', 's012', 6882.09, '2017-08-28');

zip_code	street_address	city	state	country	fk_Customer_id_address	fk_Manufacturer_id_address	Showroom_Showroom
22047	0817 Fordem Trail	Falls Church	Virginia	United States	c001	NULL	NULL
84189	226 Paget Point	Salt Lake City	Utah	United States	c002	NULL	NULL
48258	70 Hanover Court	Detroit	Michigan	United States	c003	NULL	NULL
77060	6 Dennis Parkway	Houston	Texas	United States	c004	NULL	NULL
46634	91631 Crowley Lane	South Bend	Indiana	United States	c005	NULL	NULL
7544	23 Hanson Plaza	Paterson	New Jersey	United States	c006	NULL	NULL
31210	5 Northfield Avenue	Macon	Georgia	United States	c007	NULL	NULL
48092	883 Myrtle Plaza	Warren	Michigan	United States	c008	NULL	NULL
97201	5 Elmside Pass	Portland	Oregon	United States	c009	NULL	NULL
37131	102 Melby Way	Murfreesboro	Tennessee	United States	c010	NULL	NULL
18505	7 Ridgeway Way	Scranton	Pennsylvania	United States	c011	NULL	NULL
48956	5127 Parkside Hill	Lansing	Michigan	United States	c012	NULL	NULL
40505	3935 Jackson Park	Lexington	Kentucky	United States	c013	NULL	NULL
67260	8 Cordelia Terrace	Wichita	Kansas	United States	c014	NULL	NULL
90076	41344 Sloan Hill	Los Angeles	California	United States	c015	NULL	NULL
21684	3152 7th Crossing	Ridgely	Maryland	United States	c016	NULL	NULL
10099	30 Mallory Crossing	New York City	New York	United States	c017	NULL	NULL
11054	37129 Banding Center	Port Washin...	New York	United States	c018	NULL	NULL
6606	8 Westport Terrace	Bridgeport	Connecticut	United States	c019	NULL	NULL
94121	9751 Oneill Street	San Francisco	California	United States	c020	NULL	NULL
55448	9359 Sunfield Trail	Minneapolis	Minnesota	United States	c021	NULL	NULL
95405	27 Florence Drive	Santa Rosa	California	United States	c022	NULL	NULL
64179	7241 Sullivan Trail	Kansas City	Missouri	United States	c023	NULL	NULL

9. OPTION

insert into Options (Options_id, Engine_cc, Transmission, color) values ('o001', '3000cc', 'Auto', 'Black');
insert into Options (Options_id, Engine_cc, Transmission, color) values ('o002', '4000cc', 'Auto', 'White');
insert into Options (Options_id, Engine_cc, Transmission, color) values ('o003', '6000cc', 'Auto', 'Dark-grey');
insert into Options (Options_id, Engine_cc, Transmission, color) values ('o004', '3000cc', 'Manual', 'Black');
insert into Options (Options_id, Engine_cc, Transmission, color) values ('o005', '4000cc', 'Manual', 'White');
insert into Options (Options_id, Engine_cc, Transmission, color) values ('o006', '6000cc', 'Manual', 'Dark-grey');
insert into Options (Options_id, Engine_cc, Transmission, color) values ('o007', '3000cc', 'Auto', 'White');
insert into Options (Options_id, Engine_cc, Transmission, color) values ('o008', '4000cc', 'Auto', 'Dark-grey');
insert into Options (Options_id, Engine_cc, Transmission, color) values ('o009', '6000cc', 'Auto', 'Black');
insert into Options (Options_id, Engine_cc, Transmission, color) values ('o010', '3000cc', 'Manual', 'White');

insert into Options (Options_id, Engine_cc, Transmission, color) values ('o011', '4000cc', 'Manual', 'Dark-Grey');

insert into Options (Options_id, Engine_cc, Transmission, color) values ('o012', '6000cc', 'Manual', 'Black');

insert into Options (Options_id, Engine_cc, Transmission, color) values ('o013', '3000cc', 'Auto', 'Dark-Grey');

insert into Options (Options_id, Engine_cc, Transmission, color) values ('o014', '4000cc', 'Auto', 'Black');

insert into Options (Options_id, Engine_cc, Transmission, color) values ('o015', '6000cc', 'Auto', 'White');

insert into Options (Options_id, Engine_cc, Transmission, color) values ('o016', '3000cc', 'Manual', 'Dark-Grey');

insert into Options (Options_id, Engine_cc, Transmission, color) values ('o017', '4000cc', 'Manual', 'Black');

insert into Options (Options_id, Engine_cc, Transmission, color) values ('o018', '6000cc', 'Manual', 'White');

zip_code	street_address	city	state	country	fk_Customer_id_address	fk_Manufacturer_id_address	Showroom_Showroo
22047	0817 Fordem Trail	Falls Church	Virginia	United States	c001	NULL	NULL
84189	226 Paget Point	Salt Lake City	Utah	United States	c002	NULL	NULL
48258	70 Hanover Court	Detroit	Michigan	United States	c003	NULL	NULL
77060	6 Dennis Parkway	Houston	Texas	United States	c004	NULL	NULL
46634	91631 Crowley Lane	South Bend	Indiana	United States	c005	NULL	NULL
7544	23 Hanson Plaza	Paterson	New Jersey	United States	c006	NULL	NULL
31210	5 Northfield Avenue	Macon	Georgia	United States	c007	NULL	NULL
48092	883 Myrtle Plaza	Warren	Michigan	United States	c008	NULL	NULL
97201	5 Elmside Pass	Portland	Oregon	United States	c009	NULL	NULL
37131	102 Melby Way	Murfreesboro	Tennessee	United States	c010	NULL	NULL
18505	7 Ridgeway Way	Scranton	Pennsylvania	United States	c011	NULL	NULL
48956	5127 Parkside Hill	Lansing	Michigan	United States	c012	NULL	NULL
40505	3935 Jackson Park	Lexington	Kentucky	United States	c013	NULL	NULL
67260	8 Cordelia Terrace	Wichita	Kansas	United States	c014	NULL	NULL
90076	41344 Sloan Hill	Los Angeles	California	United States	c015	NULL	NULL
21684	3152 7th Crossing	Ridgely	Maryland	United States	c016	NULL	NULL
10099	30 Mallory Crossing	New York City	New York	United States	c017	NULL	NULL
11054	37129 Banding Center	Port Washin…	New York	United States	c018	NULL	NULL
6606	8 Westport Terrace	Bridgeport	Connecticut	United States	c019	NULL	NULL
94121	9751 Oneill Street	San Francisco	California	United States	c020	NULL	NULL
55448	9359 Sunfield Trail	Minneapolis	Minnesota	United States	c021	NULL	NULL
95405	27 Florence Drive	Santa Rosa	California	United States	c022	NULL	NULL
64179	7241 Sullivan Trail	Kansas City	Missouri	United States	c023	NULL	NULL

10. MANUFACTURER

insert into Manufacturer (Manufacturer_id, Manufacturer_Name) values ('m001', 'Tesla');

insert into Manufacturer (Manufacturer_id, Manufacturer_Name) values ('m002', 'Honda');

insert into Manufacturer (Manufacturer_id, Manufacturer_Name) values ('m003', 'Ford');

insert into Manufacturer (Manufacturer_id, Manufacturer_Name) values ('m004', 'Exor');

insert into Manufacturer (Manufacturer_id, Manufacturer_Name) values ('m005', 'Toyoto');

insert into Manufacturer (Manufacturer_id, Manufacturer_Name) values ('m006', 'VolksWagon Group');

insert into Manufacturer (Manufacturer_id, Manufacturer_Name) values ('m007', 'TATA');

insert into Manufacturer (Manufacturer_id, Manufacturer_Name) values ('m008', 'BMW group');

insert into Manufacturer (Manufacturer_id, Manufacturer_Name) values ('m009', 'Hyundai');

insert into Manufacturer (Manufacturer_id, Manufacturer_Name) values ('m010', 'Renault');

insert into Manufacturer (Manufacturer_id, Manufacturer_Name) values ('m011', 'Daimler');

Manufacturer_id	Manufacturer_Name
m001	Tesla
m002	Honda
m003	Ford
m004	Exor
m005	Tovoto
m006	VolksWagon Group
m007	TATA
m008	BMW group
m009	Hyundai
m010	Renault
m011	Daimler
NULL	NULL

5.3 Queries (Based on functions, group by, having, joins, sub query etc.)

1. **Car model with price less than $ 1,50,000.**

➔ SELECT * FROM CAR_MODEL

WHERE BASE_PRICE < 1,50,000

Model_Year	model_id	model_name	availability	Base_price	fk_company_id_model
2015	i001	Model-3	available	36000	n001
2012	i002	Model-s	available	68000	n001
2014	i003	Model-x	available	55567	n001
1999	i005	Eco-sport	available	34184	n002
1994	i006	Aspire	Not-available	15023	n002
2007	i007	Ferrari-488	available	95663	n003
2005	i008	Ferrari-812	available	90446	n003
1967	i009	Elantra	available	23023	n004
1986	i010	Tucson	available	53894	n004
1985	i011	RDX	not available	35643	n005
1994	i012	ILX	available	95427	n005
2002	i013	A6	available	52742	n007
2007	i015	Duster	available	58000	n006
2004	i016	Captur	Not-available	64000	n006
2002	i017	X5	Not-available	74000	n008
2010	i018	i8	available	85000	n008
2004	i019	Accord	available	56000	n009
1968	i020	CR-V	available	77000	n009
2005	i021	Mulsanne	available	87000	n010
2006	i022	Bentayga	available	76000	n010
2007	i023	Prius	available	86000	n011

2. **Show customer name who having car model tesla MODEL 5.**

➔ SELECT C.FNAME FROM CUSTOMER C INNER JOIN CAR A INNER JOIN CAR_MODEL R

WHERE

R.MODEL_NAME = "MODEL 5" AND
A.FK_CUSTOMER_ID_CAR = C.CUSTOMER_ID AND

A.FK_MODEL_ID _CAR = R.MODEL_ID;

fname
Celestyn

3. **Show customer details who having car colour black.**

   ➔ SELECT C.* FROM CUSTOMER C INNER JOIN CAR A INNER JOIN
   OPTION O
   ON C.CUSTOMER_ID = A.FK_CUSTOMER_ID_CAR AND
   A.FK_OPTION_ID_CAR = O.OPTION_ID
   WHERE
          O.COLOUR = "BLACK";

Customer_id	fname	Lname	gender	dob	email_id	Age
c001	bonil	Becerro	Male	1983-10-29	ebececcustomerrro0@tutto.it	0
c001	bonil	Becerro	Male	1983-10-29	ebececcustomerrro0@tutto.it	0
c004	Brody	Piburn	Male	1978-10-07	bpiburn3@cnet.com	0
c025	Care	Dundridge	Male	1964-05-13	cdundridgeo@macromedia.com	0
c020	Edythe	Dallman	Female	1972-09-15	edallmani@ustream.tv	0
c021	Honey	Hallut	Female	1991-02-18	hhallutk@bbc.co.uk	0
c012	Jennee	Carncross	Female	1997-03-17	icarncrossb@ca.gov	0
c017	Lazar	Hubbock	Male	1962-03-20	lhubbocka@stumbleupon.com	0
c014	Linnell	Baroch	Female	1993-02-05	lbarochd@timesonline.co.uk	0
c019	Maudie	Lambdon	Female	1991-06-17	mlambdoni@angelfire.com	0
c009	Quinlan	Stuckow	Male	1983-03-04	qstuckow8@tiny.cc	0

4. **Show customer details who has a car of Honda company.**

   ➔ SELECT C.* FROM CUSTOMER C INNER JOIN CAR A INNER JOIN
   CAR_MODEL M INNER JOIN CAR_COMPANY Y
   WHERE
   Y.COMPANY_NAME = "HONDA" AND M.FK_COMPANY_ID_MODEL
   = Y.COMPANY_ID
   AND A.FK_MODEL_ID_CAR = M.MODEL_ID
   AND C.CUSTOMER_ID = A.FK_CUSTOMER_ID_CAR;

Customer_id	fname	Lname	gender	dob	email_id	Age
c019	Maudie	Lambdon	Female	1991-06-17	mlambdoni@angelfire.com	0
c020	Edythe	Dallman	Female	1972-09-15	edallmani@ustream.tv	0

5. **Query which will find name of all time the most selling car model;**
   ➔ SELECT MIN(BASE_PRICE) "MINIMUM BASE PRICE "
                     FROM CAR_MODEL;

model_name	No. Of Model sold
Model-3	3

6. Total cars sold in year 2016.

➔ SELECT COUNT (CAR_ID) "CAR SOLD IN 2016"
              FROM CAR
              WHERE YEAR(DATE) = "2016";

car sold in 2016
5

7. Show Car details with maximum base price.

➔ SELECT * FROM CAR_MODEL

   WHERE BASE_PRICE = (SELECT MAX(BASE_PRICE)

              FROM CAR_MODEL);

Model_Year	model_id	model_name	availability	Base_price	fk_company_id_model
2016	i040	Chiron	available	450000	n019
NULL	NULL	NULL	NULL	NULL	NULL

8. Show manufacturer name whose car has the highest price.

➔ SELECT M.MANUFACTURER_NAME FROM MANUFACTURER M
  INNER JOIN CAR_COMPANY Y INNER JOIN CAR_COMPANY Y
  INNER JOIN CAR_MODEL C
              WHERE C.BASE_PRICE = (SELECT MIN(BASE_PRICE)
              FROM CAR_MODEL) AND
              C.FK_COMPANY_ID_MODEL = Y.COMPANY_ID AND
              Y.FK_MANUFACTURER_ID_COMPANY =
              M.MANUFACTURER_ID;

manufacturer_name
Ford

9. Show customer detail who have bought car from ziemann-audi showroom.

➔ SELECT C.* FROM CUSTOMER C INNER JOIN CAR A INNER JOIN
  PAYMENT P INNER JOIN SHOWROOM S
              WHERE S.SHOWROOM_ID =
              P.FK_SHOWROOM_ID_PAYMENT AND
              P.FK_CAR_ID_PAYMENT = A.CAR_ID
              AND A.FK_CUSTOMER_ID_CAR = C.CUSTOMER_ID
              AND SHOWROOM_NAME == "ZIEMANN-AUDI";

Customer_id	fname	Lname	gender	dob	email_id	Age
c013	Cesar	Lannev	Male	1982-08-26	clannevc@blinklist.com	0
c014	Linnell	Baroch	Female	1993-02-05	lbarochd@timesonline.co.uk	0

10. Show the subsidiaries of manufacturer company Volkswagen.

➔ SELECT C.COMPANY_NAME FROM CAR_COMPANY C INNER JOIN MANUFACTURER

WHERE M,MANUFACTURER _NAME = "VOLKSWAGEN" AND M.MANUFACTURER_ID == C.MANUFACTURER_ID;

company_name
Audi
Bentlv
Lamborahini
Porsche
Buaatti

11. Customer whose name is yorke want to know how much amount did he pay for this car.

➔ SELECT SUM(AMOUNT) FROM PAYMENT
  GROUP BY FK_CAR_ID_PAYMENT HAVING
  FK_CAR_ID_PAYMENT=(SELECT CAR_ID FROM CAR C INNER JOIN
  CUSTOMER A
  WHERE
    A.CUSTOMER_ID=C.FK_CUSTOMER_ID_CAR AND
    A.FNAME="YORKE");

sum(amount)
7301.85

5.4 PL/SQL Blocks (Procedures and Functions)

1. PROCEDURES

1. If user wanna add new model in car model table.

CREATE DEFINER=`root`@`localhost` PROCEDURE `add_car_model`(in name varchar(15),in model_id varchar(5),in availability varchar(15),in price double,in car_company varchar(15))

BEGIN
declare cid varchar(5);
select comapny_id into cid from car_company where company_name=car_company;
insert into
car_model(model_year,model_id,model_name,availability,base_price,fk_company_id_model) values (year(curdate()),model_id,name,availability,price,cid);

END

Model_Year	model_id	model_name	availability	Base_price	fk_company_id_model
2012	i027	Aventador	available	276000	n013
2016	i028	Huracan	available	300000	n013
2001	i029	Phantom	available	350000	n014
2013	i030	Ghost	available	256000	n014
2008	i031	Range-Rover	available	46000	n015
2009	i032	Discovery	available	62000	n015
2006	i033	A-Class	available	108000	n016
2009	i034	GLS	available	150000	n016
2010	i035	XJ	available	76000	n017
2011	i036	XF	available	95000	n017
2002	i037	911	Not-available	176000	n018
2004	i038	Panamera	available	200000	n018
2008	i039	Veyron	available	350000	n019
2016	i040	Chiron	available	450000	n019
2018	i041	Roadster	available	198000	n001
2018	i042	Chiron	available	500000	n019
NULL	NULL	NULL	NULL	NULL	NULL

2. **In this procedure user need to enter the data in car table(means user is going to by a car) but if in car model table availabity's status is "not available" for the car model chose by user he or she can not add this(buy the car with that car model)..**

```
CREATE DEFINER=`root`@`localhost` PROCEDURE `CAR3`(IN CARid
varchar(5),IN options_id varchar(5),IN customer_id varchar(5),in model__id
varchar(5),in date1 date)
BEGIN

declare state varchar(15);
declare done int default 0;
declare c1 cursor for select availability from car_model where model_id=model__id;
DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;
open c1;

read_loop: loop
        fetch c1 into state;
                if done then
      leave read_loop;
                end if;

    if state = 'Not-available'
    then
                SIGNAL SQLSTATE '45000'
    SET MESSAGE_TEXT = 'Model Not Available right now';
    else
                insert into
car(CAR_id,fk_option_id_car,fk_customer_id_car,fk_model_id_car,ddate)
    values (CARid,options_id,customer_id,model__id,date1);
    end if;
    end loop;
    close c1;

END
```

```
call myproject.CAR3('US029', 'oo3', 'c006', 'i037', '2018-06-13');
```

Action	Message	Duration / Fetch
call myproject.CAR3('US029', 'oo3', 'c006', 'i037', '2018-06-13')	Error Code: 1644. Model Not Available right now	0.016 sec
call myproject.CAR3('US029', 'oo3', 'c006', 'i037', '2018-06-13')	Error Code: 1644. Model Not Available right now	0.000 sec

2. FUNCTION

- **It will classify the car models according to base_price,the car model with price more than 150000 is prime,price between 50,000 and 1,50,000 is mid-range, And lower than 50,000 is economy.**

```
 CREATE   DEFINER=`root`@`localhost`   FUNCTION   `classify`(base   double)
RETURNS varchar(10) CHARSET utf8
   DETERMINISTIC
BEGIN

   DECLARE lvl varchar(10);

   IF base > 150000 THEN
           SET lvl = 'PRIME';
   ELSEIF (base <= 150000 AND base >= 50000) THEN
           SET lvl = 'MID-RANGE';
   ELSEIF base < 50000 THEN
           SET lvl = 'ECONOMY';
   END IF;

 RETURN (lvl);
```

model_name	classify(base_price)
Model-3	ECONOMY
Model-s	MID-RANGE
Model-x	MID-RANGE
Mustang	PRIME
Eco-sport	ECONOMY
Aspire	ECONOMY
Ferrari-488	MID-RANGE
Ferrari-812	MID-RANGE
Elantra	ECONOMY
Tucson	MID-RANGE
RDX	ECONOMY
ILX	MID-RANGE
A6	MID-RANGE
R8	PRIME
Duster	MID-RANGE
Captur	MID-RANGE
X5	MID-RANGE
i8	MID-RANGE
Accord	MID-RANGE
CR-V	MID-RANGE
Mulsanne	MID-RANGE
Bentayga	MID-RANGE
Prius	MID-RANGE
Camry	ECONOMY
RX	MID-RANGE

5.5 VIEWS

- **View which will only show customer's fname his car and his car's color.**

```
CREATE
    ALGORITHM = UNDEFINED
    DEFINER = `root`@`localhost`
    SQL SECURITY DEFINER
VIEW `v` AS
    SELECT
        `a`.`fname` AS `customer_name`,
        `m`.`model_name` AS `car`,
        `o`.`color` AS `color`
    FROM
        (((`customer` `a`
        JOIN `car` `c`)
        JOIN `car_model` `m`)
        JOIN `options` `o`)
    WHERE
        ((`c`.`fk_customer_id_car` = `a`.`Customer_id`)
            AND (`m`.`model_id` = `c`.`fk_model_id_car`)
            AND (`c`.`fk_option_id_car` = `o`.`Options_id`))
```

customer_name	car	color
bonil	Model-3	Black
bonil	Eco-sport	Black
Celestyn	Model-s	White
Nils	Bentayga	White
Katey	Model-x	Dark-grey
Brody	Mustang	Black
Codie	Eco-sport	White
Lyn	Ferrari-812	White
Lyn	Ferrari-812	White
Lyn	Ferrari-812	White
Yorke	Aspire	Dark-grey
Lyn	Elantra	White
Stafani	Ferrari-812	Dark-grey
Quinlan	Elantra	Black
Maudie	Accord	Black
Lance	Tucson	White
Stoddard	RDX	Dark-Grey
Joan	Prius	Dark-Grey
Jennee	ILX	Black
Edythe	CR-V	Black
Cesar	A6	Dark-Grey
Linnell	R8	Black

5.5 TRIGGERS

1. It will automatically add age in age(at the time of inserting) column by subtracting current year with the year of birth.

➔ CREATE DEFINER=`root`@`localhost` TRIGGER `t1` BEFORE INSERT ON `customer` FOR EACH ROW BEGIN
   set new.Age = TIMESTAMPDIFF(YEAR,dob,CURDATE());
   END

c028	Karan	Rajput	Male	1999-03-24	rklm10@gmail.com	19
c029	Ronil	Patel	Male	1997-03-25	ronilpatel@gmail.com	21
NULL	NULL	NULL	NULL	NULL	NULL	NULL

2. At that time of updating in car table it will add previous value to car_audit;

➔ CREATE DEFINER=`root`@`localhost` TRIGGER `car_AFTER_UPDATE` AFTER UPDATE ON `car` FOR EACH ROW BEGIN
   insert into
   car_audit(car_id,option_id,customer_id,model_id,action_taken,update_date)
   values(old.car_id,old.fk_option_id_car,old.fk_customer_id_car,old.fk_model_id_car,'updated',sysdate());
   END

car_id	option_id	customer_id	model_id	action_taken	update_date
US009	o007	c007	i007	updated	2018-10-13

3. At that time of deleting in car table it will add previous value to car_audit;

➔ CREATE DEFINER=`root`@`localhost` TRIGGER `car_AFTER_DELETE` AFTER DELETE ON `car` FOR EACH ROW BEGIN
   insert into
   car_audit(car_id,option_id,customer_id,model_id,action_taken,update_date)
   values(old.car_id,old.fk_option_id_car,old.fk_customer_id_car,old.fk_model_id_car,'deleted',sysdate());
   END

5.7 CURSORS

1. in this procedure(cursor) user will enter the id of car and the procedure will count the total amount he or she already has paid and how much is remaining...

```
CREATE     DEFINER=`root`@`localhost`     PROCEDURE     `cur2demo`(car_id
varchar(5))
BEGIN
 DECLARE done INT DEFAULT FALSE;
 DECLARE a CHAR(16);
 DECLARE b, c double;
 DECLARE cur1 CURSOR FOR select b.base_price from car_model b  inner join
car   c   inner   join   payment   p   where   p.fk_car_id_payment=car_id   and
p.fk_car_id_payment=c.car_id and c.fk_model_id_car=b.model_id limit 1;
 DECLARE cur2 CURSOR FOR select sum(amount) from payment group by
fk_car_id_payment having fk_car_id_payment=car_id;
 DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = TRUE;

 OPEN cur1;
 OPEN cur2;

 read_loop: LOOP
   FETCH cur1 INTO b;
   FETCH cur2 INTO c;
   IF done THEN
    LEAVE read_loop;
   END IF;
   IF b > c THEN
     select "Customer's remaining payment";select(b-c);
   ELSE
     select "Payment Done. Collect the change of ";select(c-b);
   END IF;
 END LOOP;

 CLOSE cur1;
 CLOSE cur2;
END
```

Remaining_payment
74117.91

2. In this procedure(cursor) user will enter the name of company and the procedure will count Net income of that company by calculating the base price of car sold by that company......

```
CREATE    DEFINER=`root`@`localhost`    PROCEDURE    `new_procedure`(In
company Varchar(15))
BEGIN
declare cname varchar(5);
declare done int default 0;
declare price double;
declare total double default 0;
declare mname varchar(15);

declare netIncome cursor for select company_name,model_name,base_price from
car_company  c  inner  join  car_model  m  inner  join  car  a  where
c.company_name=company    and    m.fk_company_id_model=c.company_id    and
a.fk_model_id_car=m.model_id;
declare continue handler for not found set done =1;
open netIncome;

read_loop: loop
fetch netIncome into cname,mname,price;

if done then
leave read_loop;
end if;
set total=total + price;

end loop;
select total;
close netIncome;

END
```

netIncome
159567

6. FUTURE ENHANCEMENTS OF THE SYSTEM

- ➢ We May Further Upgrade The System Made web Application In Form Of Graphical User Interface(Gui) Based web App.
- ➢ It May Also Upgradeable To make a application for this.
- ➢ We Further Update Into Existing One Into Efficient Application,
- ➢ If Some Bugs Occur In The System & Hence To Make It Reliable.

7. BIBLIOGRAPHY

For The Successful Working Of Our Project We Have Referred Many Sources For. The Code Snippets, Logics Tips & Tips From The Various Books As Well As Websites. Most I Searched For Requirement Possession On The Books . Many Of The Logics In My Project Are Used From The Book Which We Referred & The Concepts There In Book Which Indeed Provided A Platform To Achieve Such Reliable System Database.

Reference books:

➢ Data Base System Concepts
- Henry F.Korth&A.Silberschatz. 2nd Ed. McGraw-Hill 1991

➢ SQL, PL/SQL The programming language of Oracle
- Ivan Bayross, BPB Publications

Reference Link:

➢ http://en.wikipedia.org/wiki/Database
➢ www.w3schools.com/sql