Create table:

create table addresses(

id int,

house\_number int,

city varchar(70),

postal\_code varchar (7)

);

create table people(

id int,

first\_name varchar(20),

last\_name varchar(20),

address\_id int

);

create table pets(

id int,

name1 varchar(20),

species varchar(20),

owner\_id int

);

**Adding Constraint:**

Alter table addresses

Add primary key(id);

alter table people

add constraint FK\_PeopleAddress

foreign key (address\_id) references addresses(id);

alter table pets

add constraint U\_pri

unique(species);

alter table pets

drop index U\_pri;

alter table pets

add primary key(id);

alter table pets

add constraint fk\_owner

foreign key(owner\_id) references pets(id);

alter table people

add column email varchar(50);

select \* from people ;

alter table people

add constraint u\_species

unique(email);

alter table pets CHANGE `name1` `first\_name` varchar(20);

alter table addresses modify postal\_code char(7);

describe addresses;

**Inserting and creating database:**

create table Customers(

id int auto\_increment primary key,

first\_name varchar(50),

last\_name varchar(50),

gender enum('M','F'),

phone\_number int(10)

);

alter table Customers modify phone\_number int(12);

//\* creating another table

create table Products (

Id int AUTO\_INCREMENT Primary key,

Name varchar(20),

Price Decimal(3,2)

);

/\* altering datatype in table

alter table Products

add coffee\_origin varchar(30);

select \* from Products ;

Insert into Products (Name,Price,coffee\_origin) values ('Espresso',2.50,'Brazil');

Create table Orders(

Id Int auto\_increment primary key,

Product\_id Int,

Customer\_id Int,

Order\_time datetime

);

show tables;

/\* inserting values into table\*/

INSERT INTO Customers (first\_name, last\_name, gender, phone\_number) VALUES ('Chris','Martin','M','01123147789'),('Emma','Law','F','01123439899'),('Mark','Watkins','M','01174592013'),('Daniel','Williams','M',NULL),('Sarah','Taylor','F','01176348290'),('Katie','Armstrong','F','01145787353'),('Michael','Bluth','M','01980289282'),('Kat','Nash','F','01176987789'),('Buster','Bluth','M','01173456782'),('Charlie',NULL,'F','01139287883'),('Lindsay','Bluth','F','01176923804'),('Harry','Johnson','M',NULL),('John','Smith','M','01174987221'),('John','Taylor','M',NULL),('Emma','Smith','F','01176984116'),('Gob','Bluth','M','01176985498'),('George','Bluth','M','01176984303'),('Lucille','Bluth','F','01198773214'),('George','Evans','M','01174502933'),('Emily','Simmonds','F','01899284352'),('John','Smith','M','01144473330'),('Jennifer',NULL,'F',NULL),('Toby','West','M','01176009822'),('Paul','Edmonds','M','01966947113');

/\* inserting values into orders table\*/

INSERT INTO Orders (Product\_id,Customer\_id,Order\_time) VALUES (1,1,'2017-01-01 08-02-11'),(1,2,'2017-01-01 08-05-16'),(5,12,'2017-01-01 08-44-34'),(3,4,'2017-01-01 09-20-02'),(1,9,'2017-01-01 11-51-56'),(6,22,'2017-01-01 13-07-10'),(1,1,'2017-01-02 08-03-41'),(3,10,'2017-01-02 09-15-22'),(2,2,'2017-01-02 10-10-10'),(3,13,'2017-01-02 12-07-23'),(1,1,'2017-01-03 08-13-50'),(7,16,'2017-01-03 08-47-09'),(6,21,'2017-01-03 09-12-11'),(5,22,'2017-01-03 11-05-33'),(4,3,'2017-01-03 11-08-55'),(3,11,'2017-01-03 12-02-14'),(2,23,'2017-01-03 13-41-22'),(1,1,'2017-01-04 08-08-56'),(3,10,'2017-01-04 11-23-43'),(4,12,'2017-01-05 08-30-09'),(7,1,'2017-01-06 09-02-47'),(3,18,'2017-01-06 13-23-34'),(2,16,'2017-01-07 09-12-39'),(2,14,'2017-01-07 11-24-15'),(4,5,'2017-01-08 08-54-11'),(1,1,'2017-01-09 08-03-11'),(6,20,'2017-01-10 10-34-12'),(3,3,'2017-01-10 11-02-11'),(4,24,'2017-01-11 08-39-11'),(4,8,'2017-01-12 13-20-13'),(1,1,'2017-01-14 08-27-10'),(4,15,'2017-01-15 08-30-56'),(1,7,'2017-01-16 10-02-11'),(2,10,'2017-01-17 09-50-05'),(1,1,'2017-01-18 08-22-55'),(3,9,'2017-01-19 09-00-19'),(7,11,'2017-01-19 11-33-00'),(6,12,'2017-01-20 08-02-21'),(3,14,'2017-01-21 09-45-50'),(5,2,'2017-01-22 10-10-34'),(6,24,'2017-01-23 08-32-19'),(6,22,'2017-01-23 08-45-12'),(6,17,'2017-01-23 12-45-30'),(2,11,'2017-01-24 08-01-27'),(1,1,'2017-01-25 08-05-13'),(6,11,'2017-01-26 10-49-10'),(7,3,'2017-01-27 09-23-57'),(7,1,'2017-01-27 10-08-16'),(3,18,'2017-01-27 10-13-09'),(4,19,'2017-01-27 11-02-40'),(3,10,'2017-01-28 08-03-21'),(1,2,'2017-01-28 08-33-28'),(1,12,'2017-01-28 11-55-33'),(1,13,'2017-01-29 09-10-17'),(6,6,'2017-01-30 10-07-13'),(1,1,'2017-02-01 08-10-14'),(2,14,'2017-02-02 10-02-11'),(7,10,'2017-02-02 09-43-17'),(7,20,'2017-02-03 08-33-49'),(4,21,'2017-02-04 09-31-01'),(5,22,'2017-02-05 09-07-10'),(3,23,'2017-02-06 08-15-10'),(2,24,'2017-02-07 08-27-26'),(1,1,'2017-02-07 08-45-10'),(6,11,'2017-02-08 10-37-10'),(3,13,'2017-02-09 08-58-18'),(3,14,'2017-02-10 09-12-40'),(5,4,'2017-02-10 11-05-34'),(1,2,'2017-02-11 08-00-38'),(3,8,'2017-02-12 08-08-08'),(7,20,'2017-02-12 09-22-10'),(1,1,'2017-02-13 08-37-45'),(5,2,'2017-02-13 12-34-56'),(4,3,'2017-02-14 08-22-43'),(5,4,'2017-02-14 09-12-56'),(3,5,'2017-02-15 08-09-10'),(6,7,'2017-02-15 09-05-12'),(1,8,'2017-02-15 09-27-50'),(2,9,'2017-02-16 08-51-12'),(3,10,'2017-02-16 13-07-46'),(4,11,'2017-02-17 08-03-55'),(4,12,'2017-02-17 09-12-11'),(5,10,'2017-02-17 11-41-17'),(6,18,'2017-02-17 13-05-56'),(7,19,'2017-02-18 08-33-27'),(1,17,'2017-02-19 08-12-31'),(1,1,'2017-02-20 09-50-17'),(3,5,'2017-02-20 09-51-29'),(4,6,'2017-02-20 10-43-39'),(3,1,'2017-02-21 08-32-17'),(1,1,'2017-02-21 10-30-11'),(3,2,'2017-02-21 11-08-45'),(4,3,'2017-02-22 11-46-32'),(2,15,'2017-02-22 13-35-16'),(6,13,'2017-02-23 08-34-48'),(4,24,'2017-02-24 08-32-03'),(2,13,'2017-02-25 08-03-12'),(7,17,'2017-02-25 09-34-23'),(7,23,'2017-02-25 11-32-54'),(5,12,'2017-02-26 11-47-34'),(6,4,'2017-02-27 12-12-34'),(1,1,'2017-02-28 08-59-22');

select \* from Customers

/\* using where command\*/

where phone\_number is not null;

select first\_name,phone\_number from Customers

where gender='f' and last\_name='Bluth';

select \* from Customers;

select \* from products;

show tables;

select \* from Products;

Alter table Products

Add column Coffee\_origin Varchar(30);

Select \* from customer;

describe customer;

/\* changing datatype\*/

Alter table customer

modify column Phone\_number varchar(11);

describe products;

select \* from products;

Insert into products (Name,Price,coffee\_origin) values ('Espresso',2.50,'Brazil');

Insert into products (Name,Price,coffee\_origin) values ('Macchiato',3.00,'Brazil');

Insert into products (Name,Price,coffee\_origin) values ('Cappuccino',3.50,'COSTA RICA'),('LATTE',3.50,'INDONESIA'),('Americano',3.00,'Brazil'),('Flat White',3.50,'INDONESIA'),('Filter',3.00,'INDIA');

/\*renaming the Column\*/

update products

set coffee\_origin ='Srilanka'

where id =6;

/\* usage of Or statement\*/

select Name,Price,coffee\_origin from products

where Price >3.00

or coffee\_origin='Srilanka';

/\* usage of in8/

select \* from customers

where last\_name in ('Taylor','Bluth');

select \* from customers

where first\_name NOT In('John','george');

where gender='M' and phone\_number is Null;

/\* usage of between \*/

Select \* from Customers

where last\_name between 'A' And'c';

select Name,Price from products

where coffee\_origin in ('Indonesia','Colombia')

order by Name Asc;

/\* multiple searching\*/

Select \* from orders

where Order\_time between '2017-02-01' AND '2017-02-28'

And Customer\_id in(2,4,6,8);

select \* from Customers;

select first\_name,phone\_number from Customers

where last\_name like '%ar';

update products

set coffee\_origin ='Colombia'

where id =3;

select \* from products;

/\* usage of Ascending order\*/

select \* from Customers;

select distinct last\_name from Customers

order by last\_name Asc;

select \* from orders;

select \* from orders   
/\* limiting 3 orders\*/

where customer\_id=1 and Order\_time ='2017-02-01' and '2017-02-28'

limit 3;

select \* from Products;

select Name,Price as retail\_price,coffee\_origin from Products ;

select\* from Customers;

select Distinct Last\_Name from Customers

order by Last\_Name asc;

select \* from orders;

select \* from orders

where customer\_id =1 and order\_time between '2017-02-01' and '2017-02-28';

select \*from products;

select Name,Price,coffee\_origin ,price as retail\_price from products ;

**/\* join\*/**

select p.Name ,o.order\_time, o.product\_id,p.id from orders o

join products p on o.product\_id=p.id

order by o.order\_time;

select \* from orders;

**/\* Left join \*/**

select \* from Customers;

select o.id,c.phone\_number,c.last\_name,o.order\_time from orders o

right join Customers c ON o.customer\_id =c.id

limit 5

;

update orders

set customer\_id =1

where id=1;

select \* from orders;

select o.id,c.phone\_number from orders o

join Customers c on o.customer\_id=c.id

where o.id =4;

select p.Name, o.order\_time from Products p

join Orders o on p.id=o.product\_id

where p.Name ='Filter' and

o.order\_time between '2017-01-15' and '2017-02-14';

select \* from Products;

/\* multiple Join\*/

select p.NAME ,p.price ,o.order\_time from Orders o

join Products p on o.product\_id =p.id

join Customers c on o.customer\_id=c.id

where c.gender ='f'

and o.order\_time between '2017-01-01' and '2017-01-31';

select \* from Products;

select \* from Orders;

select \* from Customers;