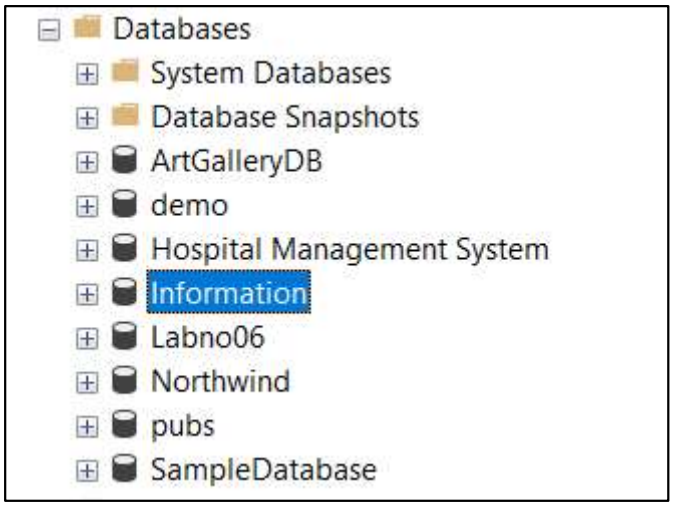
Task No. 01: Complete the Following task.

a. Create Database named as Information

Solution:

```
create database Information
```

Output:

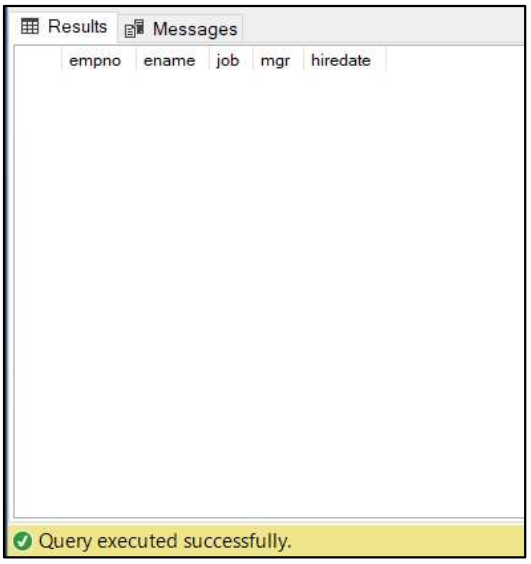


b. Using Database Information create Employee table based on the following design:

Solution:

```
create table Employee(empno decimal (4,0)  not null primary key , ename varchar (10) not null ,
job varchar (9) , mgr decimal(4,0), hiredate date)
```

Output:

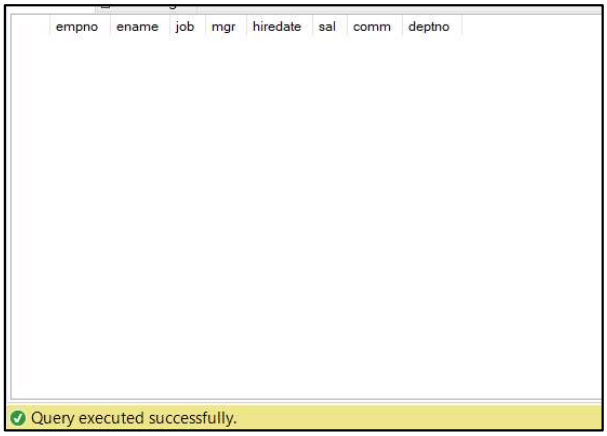


c. Modify Employee table and add three more columns:

Solution:

```
Alter table Employee add sal money not null, comm money not null, deptno decimal(2,0) not null
```

Output:

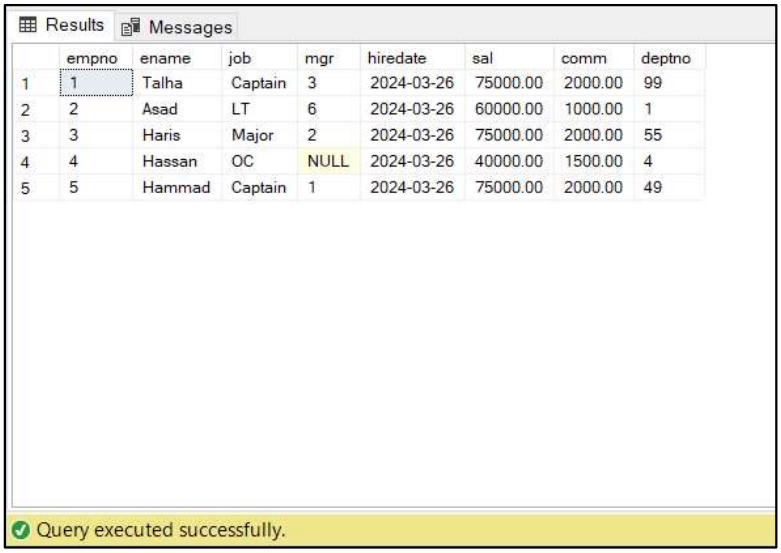


d. Insert 5 record in Employee Table

Solution:

```
Insert into  Employee values(1,'Talha','Captain',003,GETDATE(),75000,2000,99 )
Insert into  Employee values(2,'Asad','LT',006,GETDATE(),60000,1000,01 )
Insert into  Employee values(3,'Haris','Major',002,GETDATE(),75000,2000,55 )
Insert into  Employee values(4,'Hassan','OC',null,GETDATE(),40000,1500,04 )
Insert into  Employee values(5,'Hammad','Captain',001,GETDATE(),75000,2000,49 )
```

Output:



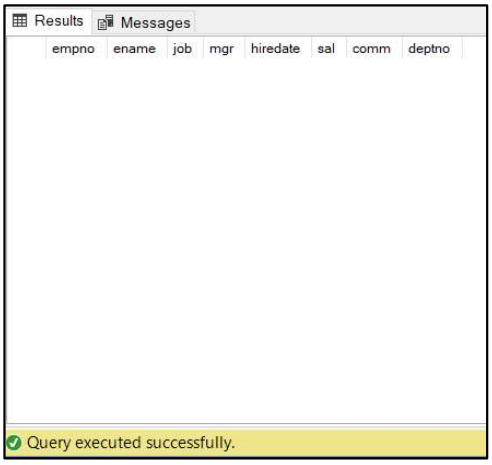
	empno	ename	job	mgr	hiredate	sal	comm	deptno
1	1	Talha	Captain	3	2024-03-26	75000.00	2000.00	99
2	2	Asad	LT	6	2024-03-26	60000.00	1000.00	1
3	3	Haris	Major	2	2024-03-26	75000.00	2000.00	55
4	4	Hassan	OC	NULL	2024-03-26	40000.00	1500.00	4
5	5	Hammad	Captain	1	2024-03-26	75000.00	2000.00	49

e. Delete all record from Employee table

Solution:

```
Delete from Employee
```

Output:

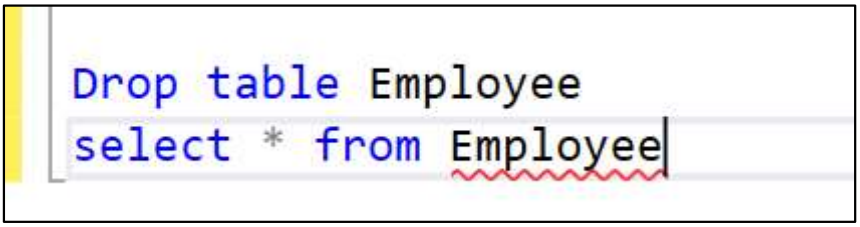


f. Drop Employee tabel Table.

Solution:

```
Drop table Employee
```

Output:

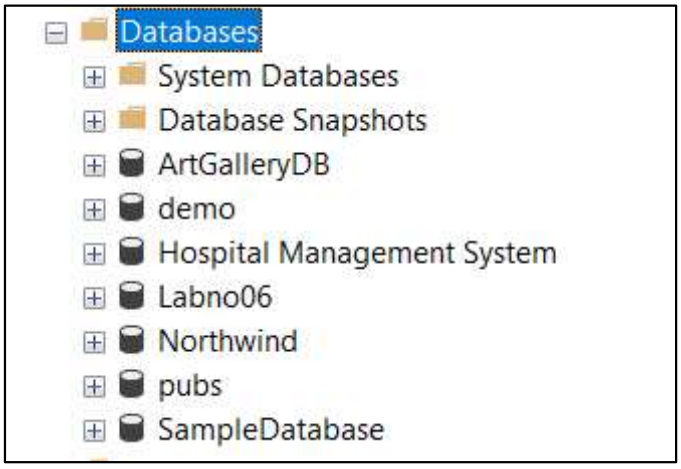


g. Drop Employee tabel Table.

Solution:

```
Drop database Information
```

Output:



Task No. 02: Create a database for an online bookstore. In the database create the table will store information about books available for sale. Each book has a unique ISBN (International Standard Book Number), a title, an author, a genre, and a price.

Solution:

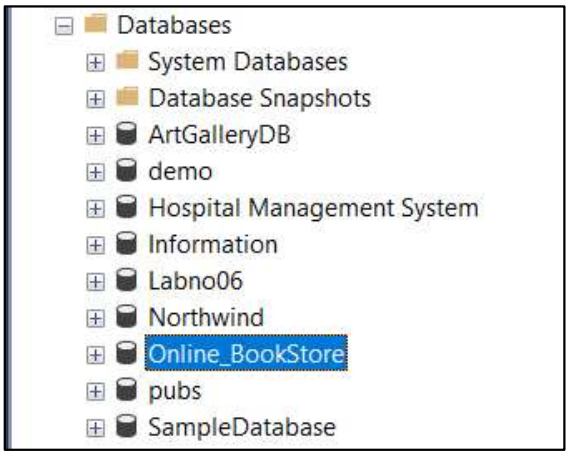
```
Create database Online_BookStore

Create table Books_Avaliable(ISBN decimal not null primary key, title varchar(100) not null,
author varchar(100) not null , genre varchar(100) , price money)

Insert into  Books_Avaliable values(009,'In the Line Of Fire','General Pervaz Musharraf',null,1000)
Insert into  Books_Avaliable values(999,'Gentle Man Series','Col. Ashfaq Ahmed ',null,600)
```

Output:

Column Name	Data Type	Allow Nulls
ISBN	decimal(18, 0)	☐
title	varchar(100)	☐
author	varchar(100)	☐
genre	varchar(100)	☑
price	money	☑
		☐

Results | Messages

	ISBN	title	author	genre	price
1	9	In the Line Of Fire	General Pervaz Musharraf	NULL	1000.00
2	999	Gentle Man Series	Col. Ashfaq Ahmed	NULL	600.00

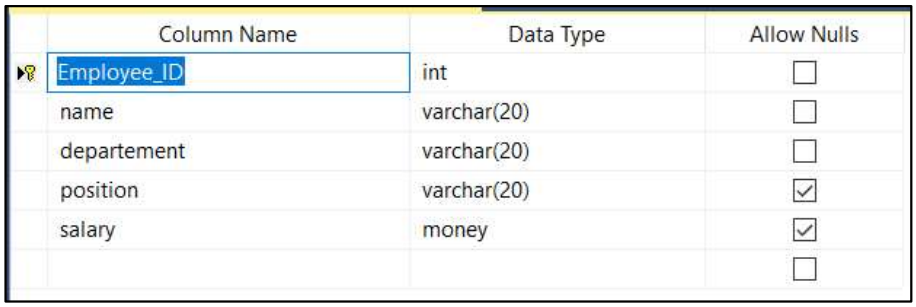


Task No. 03: Design a database for a small company to manage its employees. You need to create a table to store employee details, including their employee ID, name, department, position, and salary.

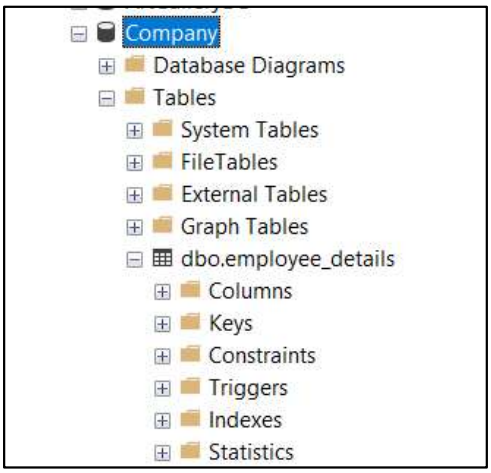
Solution:

```
Create Database Company
use Company
create table employee_details(Employee_ID int primary key not null, name varchar (20) not null,
departement varchar(20) not null, position varchar(20),salary money)
```

Output:



Column Name	Data Type	Allow Nulls
Employee_ID	int	☐
name	varchar(20)	☐
departement	varchar(20)	☐
position	varchar(20)	☑
salary	money	☑
		☐

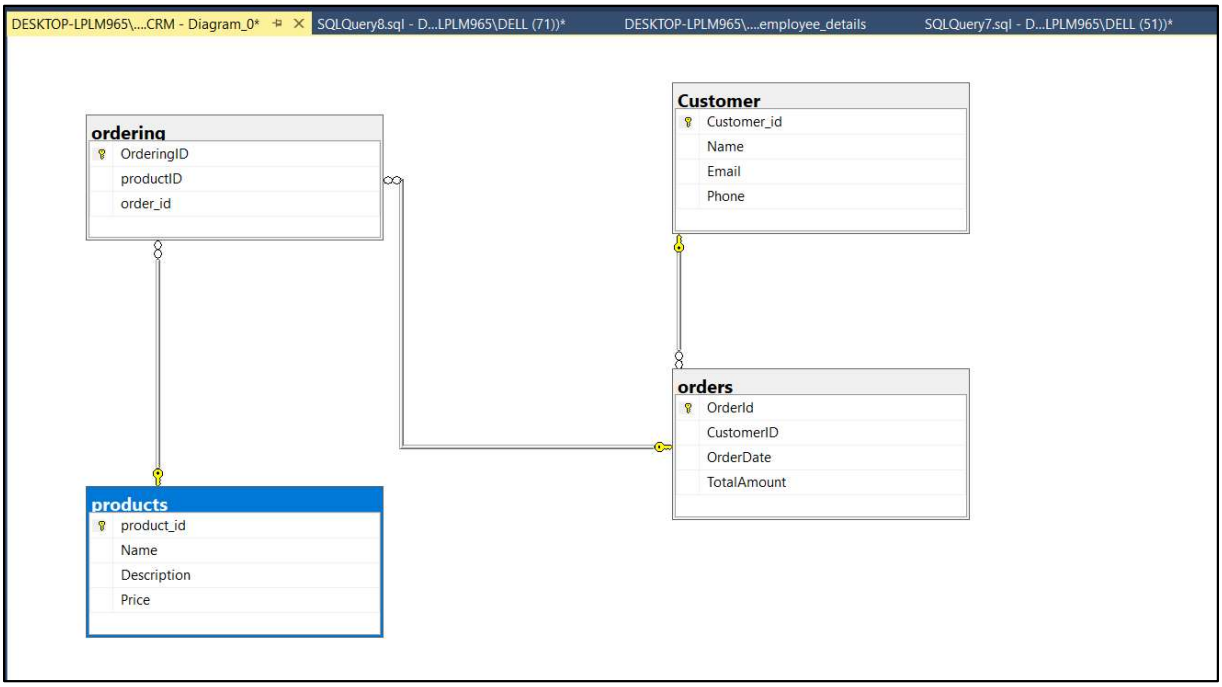


Task No. 04: Design a CRM database schema with tables for customers, orders, and products. Include fields for CustomerID, Name, Email, and Phone in the customer table. Define fields like OrderID, CustomerID (referencing Customers), OrderDate, and TotalAmount in the orders table. In the product table, include ProductID, Name, Description, and Price. Establish relationships between tables to streamline customer interactions, order processing, and product sales management in the CRM system.

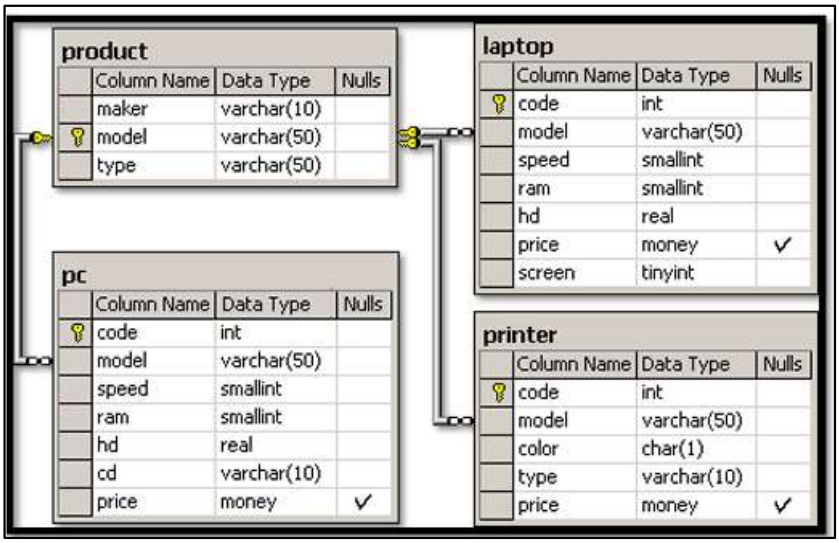
Solution:

```
create database CRM
Use CRM

Create table Customer(Customer_id int
 not null primary key, Name varchar(20) not null , Email varchar(20),
 Phone varchar(20))


Create table orders(OrderId int
 not null primary key,
 CustomerID int foreign key references
 Customer(Customer_id) not null,
 OrderDate date not null,
 TotalAmount money)

 Create table products(product_id int
 not null primary key, Name varchar(20) not null ,
 Description varchar(100),
 Price money)

 create table ordering(OrderingID int not null primary key, productID int foreign key references
products
 (product_id)
 , order_id int foreign key references orders(OrderID))
```

Output:



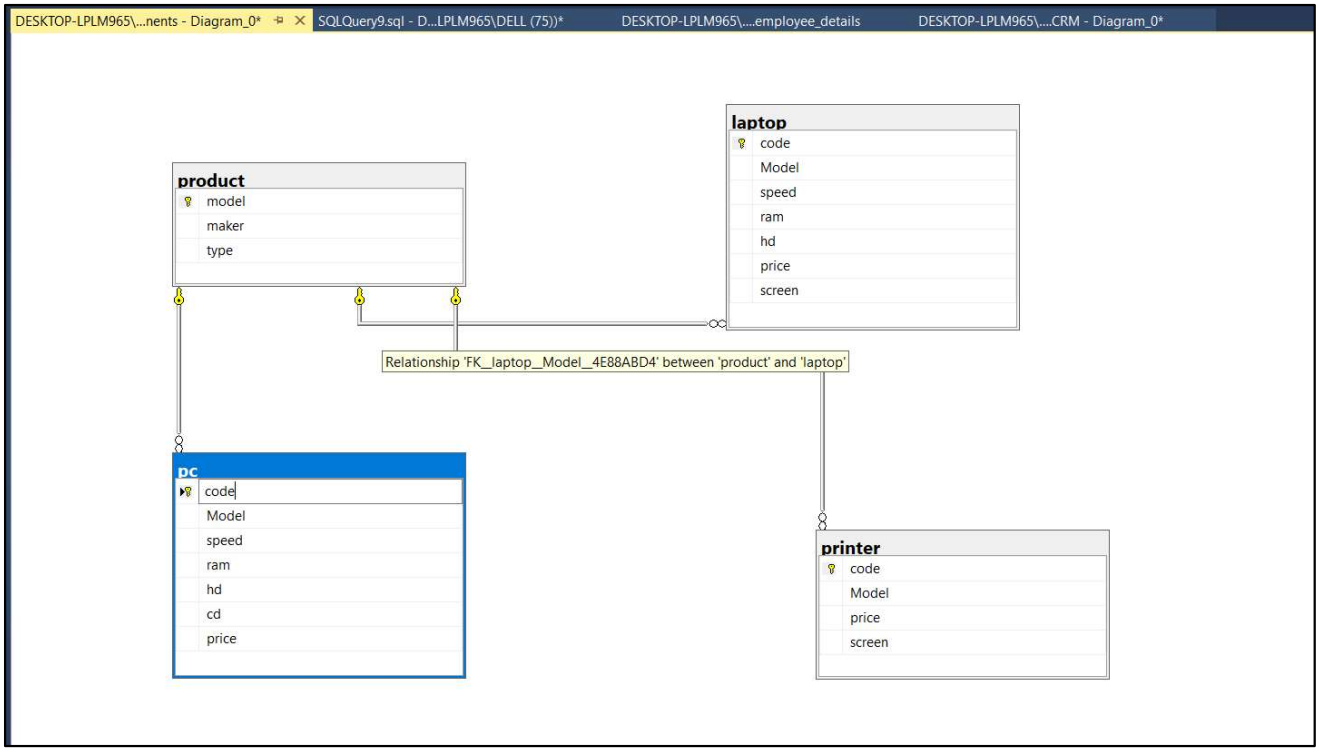
Task No. 05: Create the following tables given in diagram with constraints.



Solution:

```
create database components
use components

create table product(model varchar(50)
not null primary key,
maker varchar(10) not null
, type varchar(50) not null)

create table pc(code int  primary key not null
,Model varchar(50) foreign key references product(model),
speed smallint not null, ram smallint not null,
hd real not null,cd varchar(10) not null,
price money)


create table laptop(code int  primary key not null
,Model varchar(50) foreign key references product(model),
speed smallint not null, ram smallint not null,
hd real not null,price money, screen tinyint not null)


create table printer(code int  primary key not null
,Model varchar(50) foreign key references product(model),
price money , screen tinyint not null)
```

Output:


DESKTOP-LPLM965\...nents - Diagram_0*
SQLQuery9.sql - D...LPLM965\DELL (75))*
DESKTOP-LPLM965\....employee_details
DESKTOP-LPLM965\....CRM - Diagram_0*
product
model
maker
type
laptop
code
Model
speed
ram
hd
price
screen
Relationship 'FK__laptop__Model__4E88ABD4' between 'product' and 'laptop'
pc
code
Model
speed
ram
hd
cd
price
printer
code
Model
price
screen