Karachi Campus

A picture containing text, room

Description automatically generated

LAB EXPERIMENT NO.

**06**

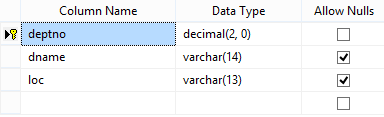
LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
|  | **DDL AND CONSTRAINTS** |
|  | **Create Department table based on the following design:** |
| 2 | **Create Employee table based on the following design:** |
| 3 | **Modify Employee table and add three more columns:** |
| 4 | **Drop Column loc from Department table** |
| 5 | **Delete all record from Employee table** |
| 6 | **Drop Department Table.** |
| 7 | **Create database Authorization**  **Add a column ‘Address’ in Starsin table in database Authorization.**  **CREATE TABLE StarsIn ( movieTitle char(30), movieYear int,starName char(30) );** |
| 8 | **Solve the Queries given below according to the following tables given below:** |
| 9 | **Create the following tables given in diagram with constraints (PK-FK relationship)** |

Submitted On:

**05 – 4 – 2023**

(Date: DD/MM/YY)

**Task No. 1:** Create Department table based on the following design:

**Solution:**

create database department\_DB

create table Department (

deptno decimal(2,0),

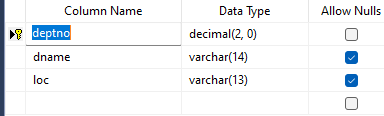
dname varchar(14),

loc varchar(13)

)

alter table Department alter column deptno decimal(2,0) not null

alter table Department add primary key(deptno)

**Output:**

Table, Excel

Description automatically generated**Task No. 2:** Create Employee table based on the following design:

**Solution:**

create database Employee\_DB

use Employee\_DB

create table Employee (

empno decimal(4,0),

ename varchar(10),

job varchar(9),

mgr decimal(4,0),

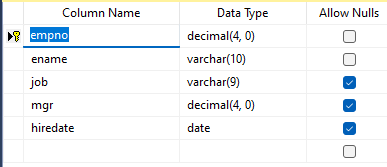
hiredate date

)

alter table Employee alter column empno decimal(4,0) not null

alter table Employee alter column ename varchar(10) not null

alter table Employee add primary key (empno)

**Output:**

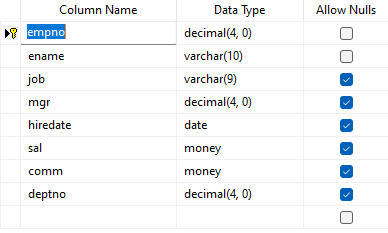
Table, Excel

Description automatically generated**Task No. 3:** Modify Employee table and add three more columns:

**Solution:**

alter table Employee add sal money,comm money,deptno decimal(4,0)

**Output:**

****

**Task No. 4:** Drop Column loc from Department table

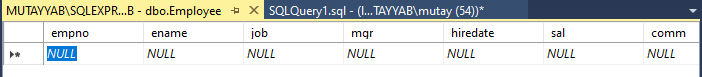
**Solution:** alter table Department drop column loc

Table

Description automatically generated**Output:**

**Task No. 5:** Delete all record from Employee table

**Solution:** delete Employee

**Output:**

window

**Task No. 6:** Drop Department Table.

**Solution:** drop table department

**Graphical user interface, application

Description automatically generatedGraphical user interface, text, application, chat or text message

Description automatically generatedOutput:**

**Task No. 7:** Create database Authorization Add a column ‘Address’ in Starsin table in database Authorization.CREATE TABLE StarsIn ( movieTitle char(30), movieYear int,starName char(30) );

**Solution:** create database AuthorizationDB

use AuthorizationDB

create table starsin(

id int not null primary key identity(1,1),

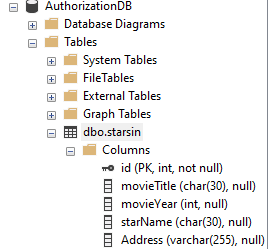
movieTitle char (30),

movieYear int,

starName char (30)

)

alter table starsin add Address varchar (255)

**Output:**

**Task No. 8:** Solve the Queries given below according to the following tables given below: 

1. Apply Not Null Constraint on all columns .
2. Apply primary key constraint in OrderID and customer ID.
3. Apply foreign key constraint on Customer \_ID in Order table.
4. Apply check constraint on city (allow Karachi, Islamabad, Lahore only).
5. Set the default value of City as ‘Karachi’.
6. Add CNIC column in Customer table with unique constraint.

**Solution:**

create database MartSystem

use MartSystem

create table Table\_Customer (

Customer\_ID int not null primary key identity(1,1),

FirstName int not null,

LastName varchar(255) not null,

City varchar(255) not null default ('karachi') check (City in('karachi','islamabad','lahore')),

Address varchar(255) not null,

)

create table Table\_Order (

Order\_ID int not null primary key identity(1,1),

Customer\_ID int not null,

Order\_Details varchar(255) not null,

Order\_Date varchar(255) not null,

required\_Date varchar(255) not null,

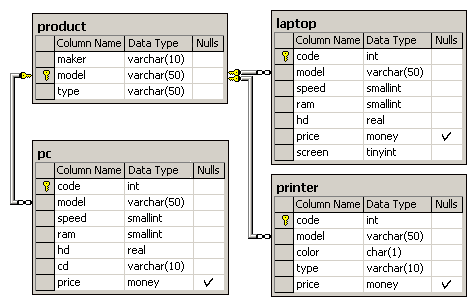
foreign key(Customer\_ID) references Table\_Customer(Customer\_ID)

)

alter table Table\_Customer add CNIC varchar(12) unique

Diagram

Description automatically generated**Output:**

**Task No. 9:** Create the following tables given in diagram with constraints (PK-FK relationship). 

**Solution:**

create database MartSystem

use MartSystem

create table product(

maker varchar(10) not null,

model varchar(50) not null primary key ,

type varchar(50) not null

)

create table laptop(

code int not null primary key identity(1,1),

model varchar(50) not null,

speed smallint not null,

ram smallint not null,

hd real not null,

price money,

screen tinyint not null,

foreign key(model) references product(model)

)

create table pc(

code int not null primary key identity(1,1),

model varchar(50) not null,

speed smallint not null,

ram smallint not null,

hd real not null,

cd varchar(10) not null,

price money ,

foreign key(model) references product(model)

)

create table printer(

code int not null primary key identity(1,1),

model varchar(50) not null,

color char(1) not null,

type varchar(10) not null,

price money,

foreign key(model) references product(model)

)

**Output:**

