

Bahria University,

Karachi Campus



LAB EXPERIMENT NO.

_____6_____

LIST OF TASKS

Task No	Objective
1	Create Department table
2	Create Employee table
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.
8	<p>Solve the Queries given below according to the following tables given below:</p> <ul style="list-style-type: none"> a) Apply Not Null Constraint on all columns . b) Apply primary key constraint in OrderID and customer ID. c) Apply foreign key constraint on Customer_ID in Order table. d) Apply check constraint on city (allow Karachi, Islamabad, Lahore only). e) Set the default value of City as 'Karachi'. f) Add CNIC column in Customer table with unique constraint.
9	Create the following tables given in diagram with constraints


Submitted On:

____18/4/2022____
(Date: DD/MM/YY)

Task# 01:- Create Department table**Query:-**

```
create table Departments (  
    deptno decimal(2,0) not null primary key,  
    dname varchar(14),  
    loc varchar(13)  
)
```


Output:-

	Column Name	Data Type	Allow Nulls
	deptno	decimal(2, 0)	<input type="checkbox"/>
	dname	varchar(14)	<input checked="" type="checkbox"/>
	loc	varchar(13)	<input checked="" type="checkbox"/>

Task # 02: Create Employee table**Query:-**

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

Output:-


	Column Name	Data Type	Allow Nulls
	empno	decimal(4, 0)	<input type="checkbox"/>
	ename	varchar(10)	<input type="checkbox"/>
	job	varchar(9)	<input checked="" type="checkbox"/>
	mgr	decimal(4, 0)	<input checked="" type="checkbox"/>
	hiredate	date	<input checked="" type="checkbox"/>

Task#03:- Modify Employee table and add three more columns:**Query:-**

```
alter table employees  
add sal money;  
alter table employees  
add comm money;
```

alter table employees
add deptno decimal(2,0);

Output:-


	Column Name	Data Type	Allow Nulls
	empno	decimal(4, 0)	<input type="checkbox"/>
	ename	varchar(10)	<input type="checkbox"/>
	job	varchar(9)	<input checked="" type="checkbox"/>
	mgr	decimal(4, 0)	<input checked="" type="checkbox"/>
	hiredate	date	<input checked="" type="checkbox"/>
	sal	money	<input checked="" type="checkbox"/>
	comm	money	<input checked="" type="checkbox"/>
	deptno	decimal(2, 0)	<input checked="" type="checkbox"/>

Task# 04:- Drop Column loc from Department table

Query:-

alter table departments
drop column loc;

Output:-

	Column Name	Data Type	Allow Nulls
	deptno	decimal(2, 0)	<input type="checkbox"/>
	dname	varchar(14)	<input checked="" type="checkbox"/>

Task# 05:- Delete all record from Employee table

Query:-

truncate table employees;

Task# 06:- Drop Department Table.

Query:-

drop table Departments;

Task# 07:- Create database Authorization. Add a column 'Address' in Starsin table in database Authorization.

Query:-

alter table StarsIn
add address varchar(50);

Output:-

	Column Name	Data Type	Allow Nulls
▶	movieTitle	char(30)	<input checked="" type="checkbox"/>
	movieYear	int	<input checked="" type="checkbox"/>
	starName	char(30)	<input checked="" type="checkbox"/>
	address	varchar(50)	<input checked="" type="checkbox"/>

Task #08:- Solve the Queries given below according to the following tables given below:

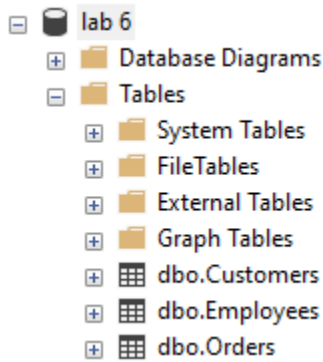
1. Apply Not Null Constraint on all columns .
2. Apply primary key constraint in OrderID and customer ID.
3. Apply foreign key constraint on Customer _ID in Order table.
4. Apply check constraint on city (allow Karachi, Islamabad, Lahore only).
5. Set the default value of City as 'Karachi'.
6. Add CNIC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

Query:-

```
create table Customers (
    CustomerId int not null primary key,
    FirstName varchar(30) not null,
    LastName varchar(30) not null,
    City varchar(30) not null default 'Karachi',
    Address text not null,
    cnic varchar(20) not null unique,
    constraint chk_city check (city in ('Karachi','Islamabad','Lahore'))
)
```

```
create table Orders (
    Order_Id int not null primary key,
    Customer_Id int not null,
    Order_Details text not null,
    Order_Date date not null,
    Required_Date date not null,
    foreign key (Customer_Id) references Customers(CustomerId),
)
```

Output:-



Task# 09:- Create the following tables given in diagram with constraints

Query:-

```
create table products (  
    maker varchar(10) not null,  
    model varchar(50) primary key not null,  
    typePro varchar(50) not null  
)  
create table pc (  
    code int primary key not null,  
    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 products(model)  
)  
create table laptop (  
    code int primary key not null,  
    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 products(model)  
)  
create table printer (  
    code int primary key not null,  
    model varchar(50) not null,  
    color char(1) not null,  
    typePri varchar(10) not null,  
    price money,  
    foreign key (model) references products(model)  
)
```

Output:-