Task 1

Creating Database **Task**

```
1        show databases;
2 ●      create database Task;
3 ●      use Task;
```

Create table Department and Employee according to Question

For Department

```
4        |
5 ● ⊖  create table Department(DeptID int primary key Not null, DeptName varchar(50) Not null, DeptCode varchar(50),
6   └     ManagerID int, ManagerName varchar(50), Descriptionn text, Activee boolean);
7
```

Field	Type	Null	Key	Default	Extra
▶ DeptID	int	NO	PRI	NULL	
DeptName	varchar(50)	NO		NULL	
DeptCode	varchar(50)	YES		NULL	
ManagerID	int	YES		NULL	
ManagerName	varchar(50)	YES		NULL	
Descriptionn	text	YES		NULL	
Activee	tinyint(1)	YES		NULL	

Inserting Values

```
10 ●    insert into Department value(101, 'Sales', 'S01', 1, 'John', 'Deals with sales and other stuffs', true );
11 ●    insert into Department value(102, 'Marketing', 'M01', 1, 'Ned', 'Deals with marketing and other stuffs', false );
12 ●    insert into Department value(103, 'It', 'I01', 1, 'Sansa', 'They are cool guys', true );
13 ●    insert into Department value(104, 'Account', 'A01', 1, 'Bran', 'Deals with accounts and other stuffs', true );
14 ●    insert into Department value(105, 'Reception', 'R01', 1, 'Arya', 'Dealing with client and customers', true );
15       |
```

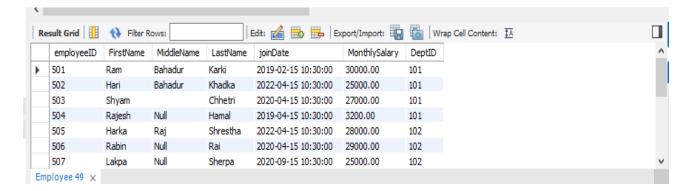| DeptID	DeptName	DeptCode	ManagerID	ManagerName	Descriptionn	Activee
▶ 101	Sales	S01	1	John	Deals with sales and other stuffs	1
102	Marketing	M01	1	Ned	Deals with marketing and other stuffs	0
103	It	I01	1	Sansa	They are cool guys	1
104	Account	A01	1	Bran	Deals with accounts and other stuffs	1
105	Reception	R01	1	Arya	Dealing with client and customers	1
* NULL	NULL	NULL	NULL	NULL	NULL	NULL

For Employee

```
18 ●⊖  create table Employee(employeeID int primary key not null, FirstName varchar(50) not null,
19  │     MiddleName varchar(50) not null, LastName varchar(50) not null, joinDate datetime, MonthlySalary decimal(6,2),
20  └     DeptID int not null, foreign key (DeptID) references Department(DeptID));
21
22 ●    alter table Employee modify MiddleName varchar(50);
23 ●    alter table Employee modify MonthlySalary decimal(7,2);
24
```

Field	Type	Null	Key	Default	Extra
▶ employeeID	int	NO	PRI	NULL	
FirstName	varchar(50)	NO		NULL	
MiddleName	varchar(50)	YES		NULL	
LastName	varchar(50)	NO		NULL	
joinDate	datetime	YES		NULL	
MonthlySalary	decimal(7,2)	YES		NULL	
DeptID	int	NO	MUL	NULL	

Inserting Values

```
9 ●    insert into Employee values(501, 'Ram', 'Bahadur', 'Karki', '2019-02-15 10:30:00', 30000.00, 101);
0 ●    insert into Employee values(502, 'Hari', 'Bahadur', 'Khadka', '2022-04-15 10:30:00', 25000.00, 101);
1 ●    insert into Employee values(503, 'Shyam', '', 'Chhetri', '2020-04-15 10:30:00', 27000.00, 101);
2 ●    insert into Employee values(517, 'Suraj', 'Raj', 'Pandey', '2022-03-15 9:30:00', 27000.00, 101);
3 ●    insert into Employee values(504, 'Rajesh', 'Null', 'Hamal', '2019-04-15 10:30:00', 3200.00, 101);
4
5 ●    insert into Employee values(505, 'Harka', 'Raj', 'Shrestha', '2022-04-15 10:30:00', 28000.00, 102);
6 ●    insert into Employee values(506, 'Rabin', 'Null', 'Rai', '2020-04-15 10:30:00', 29000.00, 102);
7 ●    insert into Employee values(507, 'Lakpa', 'Null', 'Sherpa', '2020-09-15 10:30:00', 25000.00, 102);
```

employeeID	FirstName	MiddleName	LastName	joinDate	MonthlySalary	DeptID
▶ 501	Ram	Bahadur	Karki	2019-02-15 10:30:00	30000.00	101
502	Hari	Bahadur	Khadka	2022-04-15 10:30:00	25000.00	101
503	Shyam		Chhetri	2020-04-15 10:30:00	27000.00	101
504	Rajesh	Null	Hamal	2019-04-15 10:30:00	3200.00	101
505	Harka	Raj	Shrestha	2022-04-15 10:30:00	28000.00	102
506	Rabin	Null	Rai	2020-04-15 10:30:00	29000.00	102
507	Lakpa	Null	Sherpa	2020-09-15 10:30:00	25000.00	102

Employee 49 ×

Query Question

1) Write a Single Query to find the Total Earnings by Employees grouped by Departments.

```
58      /* ----------------------------------First Question------------------------------------ */
59
60 •    SELECT
61          dept.DeptName,
62          sum(TIMESTAMPDIFF(Month, joinDate, current_timestamp()) * MonthlySalary) AS TotalEarnings
63      FROM
64          Employee emp, Department dept where emp.DeptID = dept.DeptID group by dept.DeptName;
65
```

DeptName	TotalEarnings
Sales	2154600.00
Marketing	1335000.00
It	765000.00
Account	1223000.00
Reception	698000.00

2) Write a Single Query to find the list of Employees belonging to Department Sales, with service length of more than 6 months.

```
67      /* ----------------------------------Second Question---------------------------------- */
68
69 •    SELECT
70          emp.FirstName
71      FROM
72          Employee emp, Department dept where emp.DeptID = dept.DeptID and dept.DeptName='Sales' and
73          TIMESTAMPDIFF(Month, joinDate, current_timestamp()) > 6 ;
74
75
```

FirstName
Ram
Shyam
Rajesh

3) Write a Single Query to list Employees with their Department Name and their Manager Name.

```
76      /* ----------------------------------Third Questions---------------------------------------- */
77
78  ●   SELECT
79          emp.FirstName,
80          emp.LastName,
81          dept.DeptName,
82          dept.ManagerName
83      FROM
84          Employee emp, Department dept where emp.DeptID = dept.DeptID;
85
```

FirstName	LastName	DeptName	ManagerName
Ram	Karki	Sales	John
Hari	Khadka	Sales	John
Shyam	Chhetri	Sales	John
Rajesh	Hamal	Sales	John
Suraj	Pandey	Sales	John
Harka	Shrestha	Marketing	Ned
Rabin	Rai	Marketing	Ned

Result 56 ×