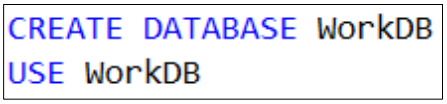
Jaydev Bhatt

SQL Assignment – 3

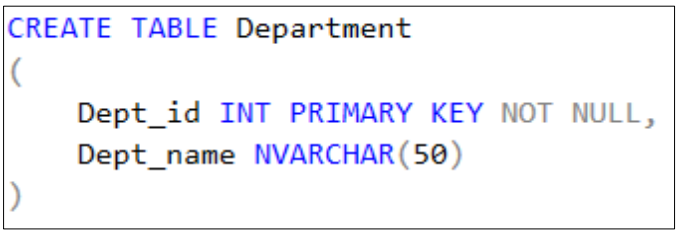
--> Creating Database Called **WorkDB**

```
CREATE DATABASE WorkDB
USE WorkDB
```



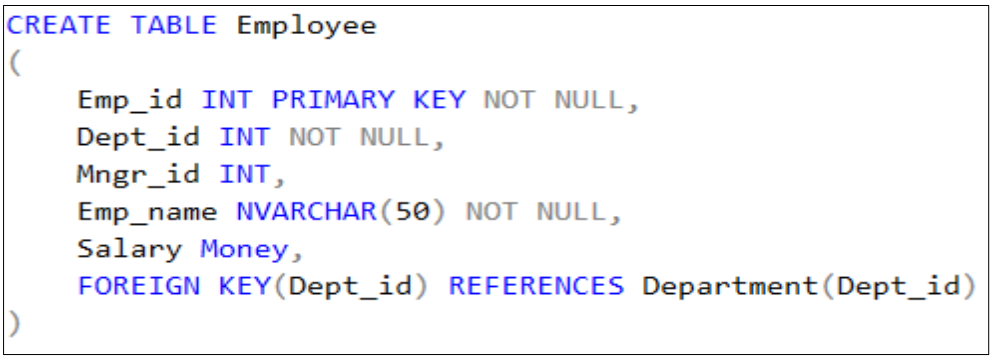
--> Creating table named **Department**

```
CREATE TABLE Department
(
	Dept_id INT PRIMARY KEY NOT NULL,
	Dept_name NVARCHAR(50)
)
```



--> Creating table named **Employee**

```
CREATE TABLE Employee
(
	Emp_id INT PRIMARY KEY NOT NULL,
	Dept_id INT NOT NULL,
	Mngr_id INT,
	Emp_name NVARCHAR(50) NOT NULL,
	Salary Money,
	FOREIGN KEY(Dept_id) REFERENCES Department(Dept_id)
)
```



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--> Inserting data into Created Table

```
INSERT INTO Department values (1001, 'Finance')
INSERT INTO Department values (2001, 'Audit')
INSERT INTO Department values (3001, 'Marketing')
INSERT INTO Department values (4001, 'Production')

INSERT INTO Employee values (501,1001,NULL,'Kavan',60000)
INSERT INTO Employee values (502,3001,501,'Naman',27500)
INSERT INTO Employee values (503,1001,501,'Sparsh',25500)
INSERT INTO Employee values (504,2001,501,'John',29570)
INSERT INTO Employee values (505,2001,504,'Arsh',31000)
INSERT INTO Employee values (506,2001,504,'Vedant',31000)
INSERT INTO Employee values (507,2001,506,'Hetvi',9000)
INSERT INTO Employee values (508,3001,502,'Aarchi',17000)
INSERT INTO Employee values (509,3001,502,'Williams',13500)
INSERT INTO Employee values (510,3001,502,'Maya',13500)
INSERT INTO Employee values (511,3001,502,'Tirth',16000)
INSERT INTO Employee values (512,2001,505,'Adity',12000)
INSERT INTO Employee values (513,3001,502,'Jay',10500)
INSERT INTO Employee values (514,4001,515,'Mrugesh',14000)
INSERT INTO Employee values (515,4001,NULL,'Steve',25000)
```

--> Viewing Inserted data:

```
SELECT * FROM Department
SELECT * FROM Employee
```

	Dept_id	Dept_name
1	1001	Finance
2	2001	Audit
3	3001	Marketing
4	4001	Production

	Emp_id	Dept_id	Mngr_id	Emp_name	Salary
1	501	1001	NULL	Kavan	60000.00
2	502	3001	501	Naman	27500.00
3	503	1001	501	Sparsh	25500.00
4	504	2001	501	John	29570.00
5	505	2001	504	Arsh	31000.00
6	506	2001	504	Vedant	31000.00
7	507	2001	506	Hetvi	9000.00
8	508	3001	502	Aarchi	17000.00
9	509	3001	502	Williams	13500.00
10	510	3001	502	Maya	13500.00
11	511	3001	502	Tirth	16000.00
12	512	2001	505	Adity	12000.00
13	513	3001	502	Jay	10500.00
14	514	4001	515	Mrugesh	14000.00
15	515	4001	NULL	Steve	25000.00

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Query 1: write a SQL query to find Employees who have the biggest salary in their Department

```
SELECT DISTINCT E.Emp_id, E.Emp_name, D.Dept_id, D.Dept_name,
E.Salary
FROM Employee E
Inner Join Department D
ON D.Dept_id = E.Dept_id,
(SELECT K.Dept_id,MAX(Salary) AS 'MAXSAL'
FROM Employee K
Group By Dept_id) Y
WHERE E.Dept_id=Y.Dept_id AND E.Salary = Y.MAXSAL
```

	Emp_id	Emp_name	Dept_id	Dept_name	Salary
1	515	Steve	4001	Production	25000.00
2	502	Naman	3001	Marketing	27500.00
3	505	Arsh	2001	Audit	31000.00
4	506	Vedant	2001	Audit	31000.00
5	501	Kavan	1001	Finance	60000.00

Query 2 : write a SQL query to find Departments that have less than 3 people in it.

```
SELECT D.Dept_id, D.Dept_Name, Y.Total 'Total Employees' FROM
(SELECT E.Dept_id,
COUNT(E.Emp_id) AS Total
FROM Employee E Group By E.Dept_id Having COUNT(E.Emp_id) < 3) Y
inner Join Department D
ON D.Dept_id = Y.Dept_id
```

	Dept_id	Dept_Name	Total Employees
1	1001	Finance	2
2	4001	Production	2

Query 3 : write a SQL query to find All Department along with the number of people there

```
SELECT D.Dept_id, D.Dept_Name, Y.Total 'Total Employees' FROM
(SELECT E.Dept_id,
COUNT(E.Emp_id) AS Total
FROM Employee E group by E.Dept_id) Y
inner Join Department D
ON D.Dept_id = Y.Dept_id
```

	Dept_id	Dept_Name	Total Employees
1	1001	Finance	2
2	2001	Audit	5
3	3001	Marketing	6
4	4001	Production	2

Query 4 : write a SQL query to find All Department along with the total salary there

```
SELECT D.Dept_id, D.Dept_Name, Y.Salary 'Total Salary' FROM
(SELECT E.Dept_id,
SUM(Salary) AS 'Salary'
FROM Employee E group by E.Dept_id) Y
inner Join Department D
ON D.Dept_id = Y.Dept_id
```

	Dept_id	Dept_Name	Total Salary
1	1001	Finance	85500.00
2	2001	Audit	112570.00
3	3001	Marketing	98000.00
4	4001	Production	39000.00