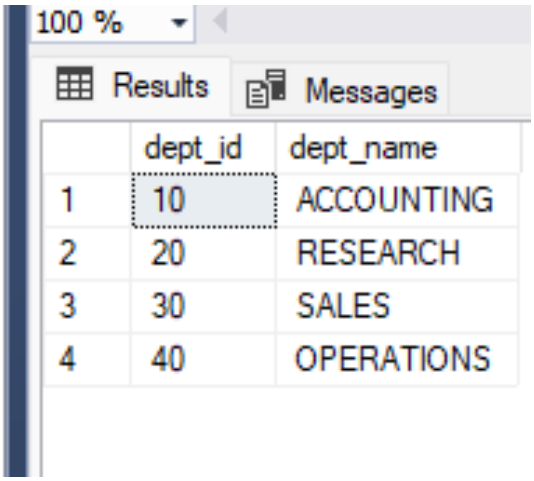
ASSIGNMENT-3

NAME : MAHAMMADAMAN GANDHI

1) TABLE1 : Department

```
CREATE TABLE Department (
       dept_id decimal(2,0) NOT NULL PRIMARY KEY,
       dept_name varchar(14) default NULL,
);


INSERT INTO Department VALUES ('10','ACCOUNTING');
INSERT INTO Department VALUES ('20','RESEARCH');
INSERT INTO Department VALUES ('30','SALES');
INSERT INTO Department VALUES ('40','OPERATIONS');
SELECT * FROM Department
```



	dept_id	dept_name
1	10	ACCOUNTING
2	20	RESEARCH
3	30	SALES
4	40	OPERATIONS

2) TABLE2 : Employee

```
CREATE TABLE Employee (
       emp_id decimal(4,0) NOT NULL PRIMARY KEY,
       emp_name varchar(10) default NULL,
       mngr_id decimal(4,0) default NULL,
       salary decimal(7,2) default NULL,
       dept_id decimal(2,0) default NULL
);

ALTER TABLE Employee
       ADD CONSTRAINT FK_Employee_dept_id FOREIGN KEY (dept_id)
       REFERENCES Department (dept_id);
INSERT INTO Employee VALUES ('7369','SMITH','7902','800.00','20');
INSERT INTO Employee VALUES ('7499','ALLEN','7698','1600.00','30');
INSERT INTO Employee VALUES ('7521','WARD','7698','1250.00','30');
INSERT INTO Employee VALUES ('7566','JONES','7839','2975.00','20');
INSERT INTO Employee VALUES ('7654','MARTIN','7698','1250.00','30');
INSERT INTO Employee VALUES ('7698','BLAKE','7839','2850.00','30');
INSERT INTO Employee VALUES ('7782','CLARK','7839','2450.00','10');
INSERT INTO Employee VALUES ('7788','SCOTT','7566','3000.00','20');
```

```sql
INSERT INTO Employee VALUES ('7839','KING',NULL,'5000.00','10');
INSERT INTO Employee VALUES ('7844','TURNER','7698','1500.00','30');
INSERT INTO Employee VALUES ('7876','ADAMS','7788','1100.00','20');
INSERT INTO Employee VALUES ('7900','JAMES','7698','950.00','30');
INSERT INTO Employee VALUES ('7902','FORD','7566','3000.00','20');
INSERT INTO Employee VALUES ('7934','MILLER','7782','1300.00','10');
```

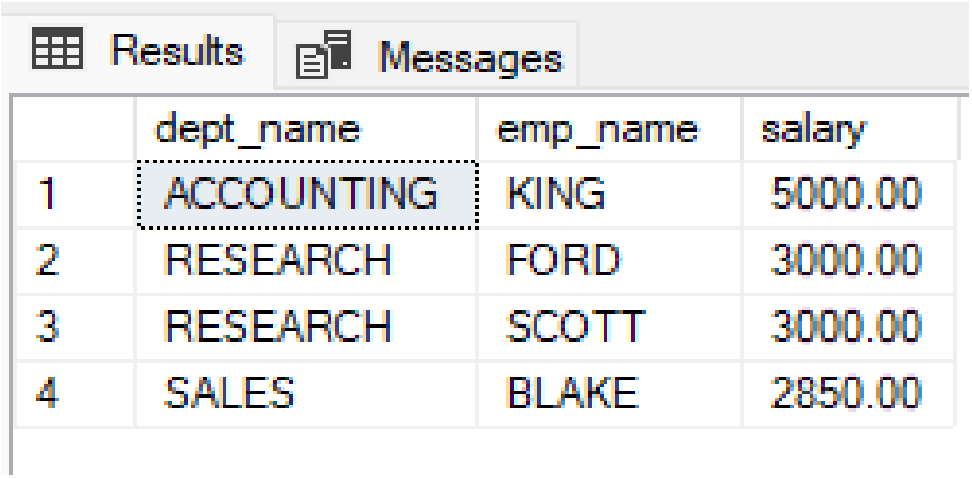
```sql
SELECT * FROM Employee
```

Results | Messages

	emp_id	emp_name	mngr_id	salary	dept_id
1	7369	SMITH	7902	800.00	20
2	7499	ALLEN	7698	1600.00	30
3	7521	WARD	7698	1250.00	30
4	7566	JONES	7839	2975.00	20
5	7654	MARTIN	7698	1250.00	30
6	7698	BLAKE	7839	2850.00	30
7	7782	CLARK	7839	2450.00	10
8	7788	SCOTT	7566	3000.00	20
9	7839	KING	NULL	5000.00	10
10	7844	TURNER	7698	1500.00	30
11	7876	ADAMS	7788	1100.00	20
12	7900	JAMES	7698	950.00	30
13	7902	FORD	7566	3000.00	20
14	7934	MILLER	7782	1300.00	10

1) Write a SQL query to find Employees who have the biggest salary in their Department .

```sql
SELECT d.dept_name,e.emp_name,salary
FROM Employee as e
left join Department as d
on e.dept_id = d.dept_id
WHERE salary in(
SELECT MAX(salary)
FROM Employee
group by dept_id
)
order by d.dept_id
```

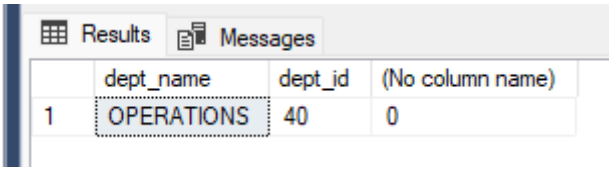


Results | Messages

	dept_name	emp_name	salary
1	ACCOUNTING	KING	5000.00
2	RESEARCH	FORD	3000.00
3	RESEARCH	SCOTT	3000.00
4	SALES	BLAKE	2850.00

2) Write a SQL query to find Departments that have less than 3 people in it.

```
SELECT dept_name,department.dept_id,count(employee.dept_id)
FROM Employee
full JOIN Department
on Employee.dept_id = Department.dept_id
GROUP BY Department.dept_id,dept_name
HAVING COUNT(employee.dept_id)<=3;
```

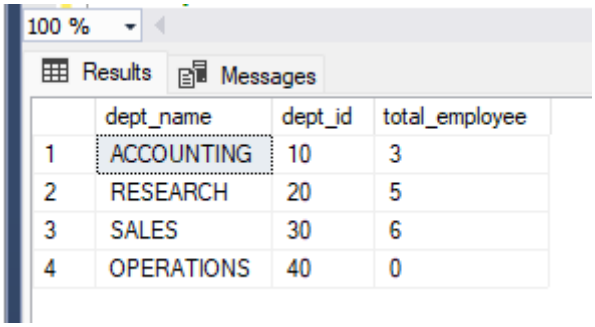


Results | Messages

	dept_name	dept_id	(No column name)
1	OPERATIONS	40	0

3) Write a SQL query to find All Department along with the number of people there.

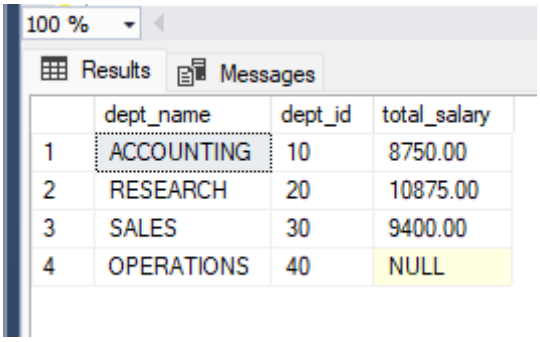
```
SELECT dept_name,department.dept_id,count(employee.dept_id) as total_employee
FROM Employee
full JOIN Department
on Employee.dept_id = Department.dept_id
GROUP BY Department.dept_id,dept_name
```



	dept_name	dept_id	total_employee
1	ACCOUNTING	10	3
2	RESEARCH	20	5
3	SALES	30	6
4	OPERATIONS	40	0

4) Write a SQL query to find All Department along with the total salary there.

```
SELECT dept_name,department.dept_id,sum(salary) as total_salary
FROM Employee
full JOIN Department
on Employee.dept_id = Department.dept_id
GROUP BY Department.dept_id,dept_name
```



	dept_name	dept_id	total_salary
1	ACCOUNTING	10	8750.00
2	RESEARCH	20	10875.00
3	SALES	30	9400.00
4	OPERATIONS	40	NULL