

College Of Engineering Trivandrum

## Application Software Development Lab



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## Cycle 1

### Exp No 2

## BASIC SQL QUERIES – I

### 1 Aim

To study the basic sql queries such as

- 1. SELECT
- 2. INSERT
- 3. UPDATE
- 4. DELETE.

### Questions

Create table named employee and populate it.

```
create table Employee(Emp_id INT NOT NULL,Emp_name VARCHAR(10) NOT NULL,Dept VARCHAR(20) NOT NULL,Salary INT ,PRIMARY KEY(Emp_id) );
```

```
insert into Employee values('1' , 'Micheal', 'Production', '2500');
insert into Employee values('2', 'Joe', 'Production' , '2500');
insert into Employee values('3', 'Smith', 'Sales' , '2250');
insert into Employee values('4', 'David', 'Marketing' , '2900');
insert into Employee values('5', 'Richard', 'Sales' , '1600');
insert into Employee values('6', 'Jessy', 'Marketing' , '1800');
insert into Employee values('7', 'Jane', 'Sales' , '2000');
insert into Employee values('8', 'Janet', 'Production' , '3000');
insert into Employee values('9', 'Neville', 'Marketing' , '2750');
insert into Employee values('10', 'Richardson', 'Sales' , '1800');
```

1. Display the details of all the employees.

```
select * from Employee;
```

```
asdlab=# select * from Employee;
 emp_id | emp_name | dept | salary
-----+-----+-----+-----
      2 | Joe      | Production | 2500
      3 | Smith    | Sales      | 2250
      5 | Richard  | Sales      | 1600
      6 | Jessy    | Marketing  | 1800
      7 | Jane     | Sales      | 2000
      8 | Janet    | Production | 3000
      9 | Neville  | Marketing  | 2750
     10 | Richardson | Sales      | 1800
(8 rows)
```

Figure 1: Employee Table

2. Display the names and id's of all employees.

```
select emp_id,emp_name from Employee;
```

```
asdlab=# select emp_id,emp_name from Employee;
 emp_id | emp_name
-----+-----
      2 | Joe
      3 | Smith
      5 | Richard
      6 | Jessy
      7 | Jane
      8 | Janet
      9 | Neville
     10 | Richardson
(8 rows)

asdlab=#
```

Figure 2: Emp id and emp name Table

3. Delete the entry corresponding to employee id:10.

```
delete from Employee where emp_id=10;
```

```
asdlab=# delete from Employee where emp_id=10;
DELETE 1
asdlab=# select * from Employee;
 emp_id | emp_name | dept      | salary
-----+-----+-----+-----
      2 | Joe      | Production |    2500
      3 | Smith    | Sales      |    2250
      5 | Richard  | Sales      |    1600
      6 | Jessy    | Marketing  |    1800
      7 | Jane     | Sales      |    2000
      8 | Janet    | Production |    3000
      9 | Neville  | Marketing  |    2750
(7 rows)

asdlab=#
```

Figure 3: Employee Table after deletion

4. Insert a new tuple to the table. The salary field of the new employee should be kept NULL.

```
insert into Employee values('10', 'Abhi', 'Production');
```

```
asdlab=# insert into Employee values('10', 'Abhi', 'Production' );
INSERT 0 1
asdlab=# select * from Employee;
 emp_id | emp_name | dept      | salary
-----+-----+-----+-----
      2 | Joe      | Production |    2500
      3 | Smith    | Sales      |    2250
      5 | Richard  | Sales      |    1600
      6 | Jessy    | Marketing  |    1800
      7 | Jane     | Sales      |    2000
      8 | Janet    | Production |    3000
      9 | Neville  | Marketing  |    2750
     10 | Abhi     | Production |
(8 rows)

asdlab=#
```

Figure 4: Employee Table after deletion

5. Find the details of all employees working in the marketing department.

```
select * from Employee where Dept='Marketing';
```

```
asdlab=# select * from Employee where Dept='Marketing';
 emp_id | emp_name | dept    | salary
-----+-----+-----+-----
      6 |  Jessie  | Marketing |    1800
      9 |  Neville  | Marketing |    2750
      4 |   David  | Marketing |    2900
(3 rows)

asdlab=#
```

Figure 5: Employees working in marketing

6. Add the salary details of the newly added employee.

```
update Employee set salary='1000' where emp_id=10;
```

```
asdlab=# update Employee set salary='1000' where emp_id=10;
UPDATE 1
asdlab=# select * from Employee;
 emp_id | emp_name | dept    | salary
-----+-----+-----+-----
      2 |    Joe   | Production |    2500
      3 |   Smith  | Sales      |    2250
      5 | Richard  | Sales      |    1600
      6 |  Jessie  | Marketing  |    1800
      7 |   Jane   | Sales      |    2000
      8 |   Janet  | Production |    3000
      9 |  Neville  | Marketing  |    2750
      1 | Micheal  | Production |    2500
      4 |   David  | Marketing  |    2900
     10 |   Abhi   | Production |    1000
(10 rows)
```

Figure 6: After setting salary of new employee

7. Update the salary of Richard to 1900.

```
update Employee set salary='1900' where emp_name=Richard;
```

```
asdlab=# update Employee set salary='1900' where emp_name='Richard';
UPDATE 1
asdlab=# select * from Employee;
 emp_id | emp_name | dept      | salary
-----+-----+-----+-----
      2 | Joe      | Production |    2500
      3 | Smith    | Sales      |    2250
      6 | Jessy    | Marketing  |    1800
      7 | Jane     | Sales      |    2000
      8 | Janet    | Production |    3000
      9 | Neville   | Marketing  |    2750
      1 | Micheal  | Production |    2500
      4 | David    | Marketing  |    2900
     10 | Abhi     | Production |    1000
      5 | Richard  | Sales      |    1900
(10 rows)
```

Figure 7: After updating richard's salary

8. Find the details of all employees who are working for marketing and has a salary greater than 2000\$.

```
select * from Employee where Dept='Marketing' and salary >'2000';
```

```
asdlab=# select * from Employee where Dept='Marketing' and salary >'2000';
 emp_id | emp_name | dept      | salary
-----+-----+-----+-----
      9 | Neville   | Marketing |    2750
      4 | David     | Marketing |    2900
(2 rows)
asdlab=#
```

Figure 8: Marketing and above 2000

9. List the names of all employees working in the sales department and marketing department.

```
select emp_name from Employee where Dept='Marketing' or Dept='Sales';
```

```
asdlab=# select emp_name from Employee where Dept='Marketing' or Dept='Sales';
 emp_name
-----
Smith
Jessy
Jane
Neville
David
Richard
(6 rows)
```

Figure 9: Employees in sales or marketing

10. List the names and department of all employees whose salary is between 2300\$ and 3000\$.

```
select emp_name,Dept from Employee where salary>'2300' and salary<'3000' ;
```

```
asdlab=# select emp_name,Dept from Employee where salary>'2300' and salary<'3000' ;
emp_name | dept
-----+-----
Joe      | Production
Neville  | Marketing
Micheal  | Production
David    | Marketing
(4 rows)

asdlab=#
```

Figure 10: Salary in between 2300 , 3000

11. Update the salary of all employees working in production department 12%..

```
update Employee set salary=salary*1.2 ;
```

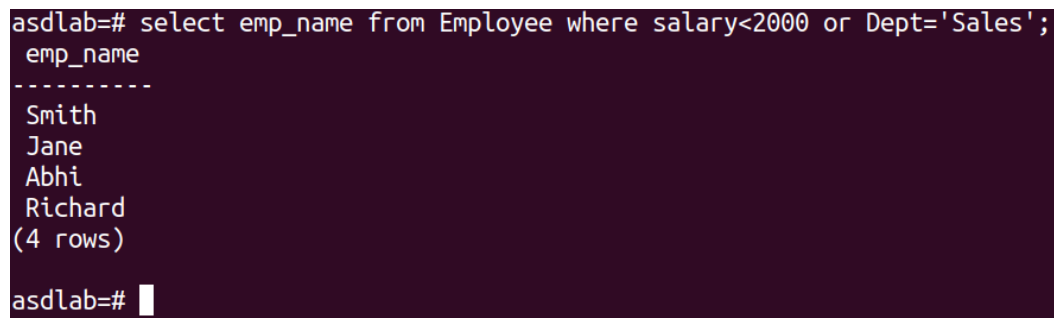
```
asdlab=# update Employee set salary=salary*1.2 ;
UPDATE 10
asdlab=# select * from Employee;
 emp_id | emp_name | dept      | salary
-----+-----+-----+-----
      2 | Joe      | Production | 3000
      3 | Smith    | Sales      | 2700
      6 | Jessy    | Marketing  | 2160
      7 | Jane     | Sales      | 2400
      8 | Janet    | Production | 3600
      9 | Neville  | Marketing  | 3300
      1 | Micheal  | Production | 3000
      4 | David    | Marketing  | 3480
     10 | Abhi     | Production | 1200
      5 | Richard  | Sales      | 2280
(10 rows)

asdlab=#
```

Figure 11: Updating everyone's salary

12. Display the names of all employees whose salary is less than 2000\$ or working for sales department.

```
select emp_name from Employee where salary<2000 or Dept='Sales';
```



```
asdlab=# select emp_name from Employee where salary<2000 or Dept='Sales';
 emp_name
-----
Smith
Jane
Abhi
Richard
(4 rows)

asdlab=#
```

Figure 12: Sales and less than 2000

## 2 Result

The query was executed and the output was obtained.