



IMPLEMENTATION OF DIFFERENT TYPES OF OPERATORS IN SQL

Lab 3

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Write SQL statements for the following query.

Create a table salesmen with following schema:(salesman_id, name , city , age, commission)

```
[mysql> create table Salesman(salesman_id varchar(10), name varchar(20),city varchar(15), age int, commission float);
Query OK, 0 rows affected (0.01 sec)
```

```
[mysql> describe salesman;
```

```
+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| salesman_id | varchar(10)   | YES  |     | NULL    |      |
| name        | varchar(20)   | YES  |     | NULL    |      |
| city        | varchar(15)   | YES  |     | NULL    |      |
| age         | int           | YES  |     | NULL    |      |
| commission  | float         | YES  |     | NULL    |      |
+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)
```

Displaying data entered (using query: insert into employee values(...))

```
[mysql> select * from salesman;
```

```
+-----+-----+-----+-----+-----+
| salesman_id | name  | city    | age | commission |
+-----+-----+-----+-----+-----+
| 3005        | Amit  | Paris   | 38  | 600        |
| 3006        | Kiran | Delhi   | 26  | 400        |
| 3007        | Nitin | Rome    | 24  | 450        |
| 3008        | Kalki | Paris   | 38  | 900        |
| 3009        | Naina | Rome    | 40  | 200        |
| 3010        | Sunil | Mumbai  | 33  | 300        |
| 3011        | Beena | Bangalore | 39  | 750        |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

1. Filter those salesmen with all information who comes from any of the cities Paris and Rome

```
[mysql> select * from salesman where city in ("Paris", "Rome");
```

salesman_id	name	city	age	commission
3005	Amit	Paris	38	600
3007	Nitin	Rome	24	450
3008	Kalki	Paris	38	900
3009	Naina	Rome	40	200

```
4 rows in set (0.00 sec)
```

2. Make a list of salesman_id, name, city and commission of each salesman who live in cities other than Paris and Rome

```
[mysql> select salesman_id,name,city,commission from salesman where city not in ("Paris", "Rome");
```

salesman_id	name	city	commission
3006	Kiran	Delhi	400
3010	Sunil	Mumbai	300
3011	Beena	Bangalore	750

```
3 rows in set (0.00 sec)
```

3. Write a SQL statement to find those salesmen with all information who gets the commission within a range of 100 and 500

```
[mysql> select * from salesman where commission between 100 and 500;
```

salesman_id	name	city	age	commission
3006	Kiran	Delhi	26	400
3007	Nitin	Rome	24	450
3009	Naina	Rome	40	200
3010	Sunil	Mumbai	33	300

```
4 rows in set (0.01 sec)
```

4. Write a query to sort out those salesmen with all information whose ID value is within any of 3007, 3008 and 3009.

```
[mysql> select * from salesman where salesman_id in("3007","3008","3009") order by salesman_id;
+-----+-----+-----+-----+-----+
| salesman_id | name  | city  | age  | commission |
+-----+-----+-----+-----+-----+
| 3007        | Nitin | Rome  | 24   | 450         |
| 3008        | Kalki | Paris | 38   | 900         |
| 3009        | Naina | Rome  | 40   | 200         |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

5. Write a SQL statement to find those salesmen with all other information and name started with any letter within 'A' and 'K'

```
[mysql> select * from salesman where name >= 'A' and name <= 'L' order by name;
+-----+-----+-----+-----+-----+
| salesman_id | name  | city      | age  | commission |
+-----+-----+-----+-----+-----+
| 3005        | Amit  | Paris     | 38   | 600         |
| 3011        | Beena | Bangalore | 39   | 750         |
| 3008        | Kalki | Paris     | 38   | 900         |
| 3006        | Kiran | Delhi     | 26   | 400         |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

6. Write a SQL statement to find that salesman with all information whose name begins with the letter 'B'.

```
[mysql> select * from salesman where name like 'B%';
+-----+-----+-----+-----+-----+
| salesman_id | name  | city      | age  | commission |
+-----+-----+-----+-----+-----+
| 3011        | Beena | Bangalore | 39   | 750         |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

7. Write a SQL statement to find all those salesmen with all information whose names are ending with the letter 'n'

```
[mysql> select * from salesman where name like '%n';  
+-----+-----+-----+-----+-----+  
| salesman_id | name | city | age | commission |  
+-----+-----+-----+-----+-----+  
| 3006        | Kiran | Delhi | 26 | 400 |  
| 3007        | Nitin | Rome | 24 | 450 |  
+-----+-----+-----+-----+-----+  
2 rows in set (0.00 sec)
```

8. Write a SQL statement to find those salesmen with all information whose name containing the 1st character is 'N' and the 4th character is 'l' and rests may be any character

```
[mysql> select * from salesman where name like 'n__i%';  
+-----+-----+-----+-----+-----+  
| salesman_id | name | city | age | commission |  
+-----+-----+-----+-----+-----+  
| 3007        | Nitin | Rome | 24 | 450 |  
+-----+-----+-----+-----+-----+  
1 row in set (0.01 sec)
```

9. Display the salesman details in ascending order of his age

```
[mysql> select * from salesman order by age;  
+-----+-----+-----+-----+-----+  
| salesman_id | name | city | age | commission |  
+-----+-----+-----+-----+-----+  
| 3007        | Nitin | Rome | 24 | 450 |  
| 3006        | Kiran | Delhi | 26 | 400 |  
| 3010        | Sunil | Mumbai | 33 | 300 |  
| 3005        | Amit | Paris | 38 | 600 |  
| 3008        | Kalki | Paris | 38 | 900 |  
| 3011        | Beena | Bangalore | 39 | 750 |  
| 3009        | Naina | Rome | 40 | 200 |  
+-----+-----+-----+-----+-----+  
7 rows in set (0.01 sec)
```

10. Display names of salesman containing two a's in his name

```
[mysql> select * from salesman where name like '%a%a%';
+-----+-----+-----+-----+-----+
| salesman_id | name | city | age | commission |
+-----+-----+-----+-----+-----+
| 3009        | Naina | Rome | 40  | 200         |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

11. Display the count of salesman within the age group 25 to 35

```
[mysql> select count(*) from salesman where age between 25 and 35;
+-----+
| count(*) |
+-----+
| 2        |
+-----+
1 row in set (0.00 sec)
```

12. Display the total number of salesman staying in each city

```
[mysql> select city, count(*) from salesman group by city;
+-----+-----+
| city      | count(*) |
+-----+-----+
| Paris     | 2        |
| Delhi     | 1        |
| Rome      | 2        |
| Mumbai    | 1        |
| Bangalore | 1        |
+-----+-----+
5 rows in set (0.00 sec)
```