

EXPERIMENT 3

Aim: To perform the various Clauses in sql.

Software Used:

MySQL

Theory:

ORDER BY:

The ORDER BY keyword is used to sort the result-set in ascending or descending order. The ORDER BY keyword sorts the records in ascending order by default. To sort the records in descending order, use the DESC keyword.

GROUP BY:

The GROUP BY statement groups rows that have the same values into summary rows, like "find the number of customers in each country". The GROUP BY statement is often used with aggregate functions (COUNT(), MAX(), MIN(), SUM(), AVG()) to group the result-set by one or more columns.

HAVING:

The HAVING clause was added to SQL because the WHERE keyword cannot be used with aggregate functions.

```
mysql> use Play;
Database changed
mysql> create table students(
    -> rollno int not null,
    -> age int not null,
    -> name varchar(50) not null,
    -> address varchar(100) not null,
    -> phone varchar(20) not null,
    -> primary key(rollno));
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> insert into students (rollno,age,name,address,phone)
-> values
-> (1,18,'Ashish','sector 47, noida','9876543219'),
-> (2,19,'Tushar','sector 44, noida','9876643219'),
-> (3,17,'Dhruv','sector 137, noida','9876643519');
```

Query OK, 3 rows affected (0.02 sec)

Records: 3 Duplicates: 0 Warnings: 0

```
mysql> select * from students order by rollno desc;
```

rollno	age	name	address	phone
3	17	Dhruv	sector 137, noida	9876643519
2	19	Tushar	sector 44, noida	9876643219
1	18	Ashish	sector 47, noida	9876543219

3 rows in set (0.01 sec)

```
mysql> select name ,sum(age) from students
```

```
-> group by name;
```

name	sum(age)
Ashish	18
Tushar	19
Dhruv	17

3 rows in set (0.01 sec)

```
mysql> select name ,sum(age) as age
```

```
-> from students
```

```
-> group by name
```

```
-> having age >= 18;
```

name	age
Ashish	18
Tushar	19

2 rows in set (0.01 sec)

Conclusion: Performed the various Clauses in sql