Experiment - 1.2

Student Name: Alasso UID:

Section/Group: Branch: BE-CSE

Subject Code: 21CSH - 214 Subject Name: DBMS

Date of Performance: 02/09/2022 Semester: 3rd

AIM:

To explore "SELECT" clause using where, order by, between, like, group by, having etc.

DBMS script and output:

Creating Tables and inserting values:

```
create table students(student_id int, first_name varchar(255), last_name varchar(255), section varchar(255), Address varchar(255))

Table created.

insert into students(student_id, first_name, last_name, section, Address) values('111','Shivam','Kumar','A','Panchkula')

1 row(s) inserted.

insert into students(student_id, first_name, last_name, section, Address) values('112','Karan','Mali','B','Pinjore')

1 row(s) inserted.

insert into students(student_id, first_name, last_name, section, Address) values('113','Shashwat','Pratap','C','Kharar')

1 row(s) inserted.

insert into students(student_id, first_name, last_name, section, Address) values('114','Sampanna','Shukla','D','Chandimandir')

1 row(s) inserted.

insert into students(student_id, first_name, last_name, section, Address) values('115','Shubham','Kumar','E','Panchkula')

1 row(s) inserted.
```

WHERE Command:

Syntax: select * from table_name where Condition;

select * from students where Address='Panchkula'

| STUDENT_ID | FIRST_NAME | LAST_NAME | SECTION | ADDRESS |
|------------|------------|-----------|---------|-----------|
| 111 | Shivam | Kumar | А | Panchkula |
| 115 | Shubham | Kumar | Е | Panchkula |

2 rows selected.

LIKE Command:

Syntax: select * from *table_name* where *Condition* like *pattern*;

select * from students where first_name LIKE 'S%'

| STUDENT_ID | FIRST_NAME | LAST_NAME | SECTION | ADDRESS |
|------------|------------|-----------|---------|--------------|
| 111 | Shivam | Kumar | А | Panchkula |
| 113 | Shashwat | Pratap | С | Kharar |
| 114 | Sampanna | Shukla | D | Chandimandir |
| 115 | Shubham | Kumar | Е | Panchkula |

4 rows selected.

IN Command:

Syntax: select * from table_name where Condition in (select statement);

select * from students where last_name in ('Kumar')

| STUDENT_ID | FIRST_NAME | LAST_NAME | SECTION | ADDRESS |
|------------|------------|-----------|---------|-----------|
| 111 | Shivam | Kumar | А | Panchkula |
| 115 | Shubham | Kumar | Е | Panchkula |

2 rows selected.

BETWEEN Command:

Syntax: select * from table_name where Condition between value1 and value2;

select * from students where student_id between '112' and '115'

| STUDENT_ID | FIRST_NAME | LAST_NAME | SECTION | ADDRESS |
|------------|------------|-----------|---------|--------------|
| 112 | Karan | Mali | В | Pinjore |
| 113 | Shashwat | Pratap | С | Kharar |
| 114 | Sampanna | Shukla | D | Chandimandir |
| 115 | Shubham | Kumar | Е | Panchkula |

4 rows selected.

ORDER BY Command:

Syntax: select * from table_name where Condition order by column_name;

select * from students order by student_id desc

| STUDENT_ID | FIRST_NAME | LAST_NAME | SECTION | ADDRESS |
|------------|------------|-----------|---------|--------------|
| 115 | Shubham | Kumar | Е | Panchkula |
| 114 | Sampanna | Shukla | D | Chandimandir |
| 113 | Shashwat | Pratap | С | Kharar |
| 112 | Karan | Mali | В | Pinjore |
| 111 | Shivam | Kumar | А | Panchkula |

5 rows selected.

AND Command:

Syntax: select * from table_name where Condition1 and condition2;

select * from students where student_id='111' and first_name='Shivam'

| STUDENT_ID | FIRST_NAME | LAST_NAME | SECTION | ADDRESS |
|------------|------------|-----------|---------|-----------|
| 111 | Shivam | Kumar | А | Panchkula |

OR Command:

Syntax: select * from table_name where Condition1 or condition2;

select * from students where student_id='111' or first_name='Shivam'

| STUDENT_ID | FIRST_NAME | LAST_NAME | SECTION | ADDRESS |
|------------|------------|-----------|---------|-----------|
| 111 | Shivam | Kumar | А | Panchkula |

GROUP BY Command:

Syntax: select * from table_name where Condition group by column_name;

SELECT MAX(student_id), Address FROM students GROUP BY Address

| MAX(STUDENT_ID) | ADDRESS |
|-----------------|--------------|
| 113 | Kharar |
| 115 | Panchkula |
| 112 | Pinjore |
| 114 | Chandimandir |

Learning Outcomes:

- 1. We have learnt about using different clause to use with SELECT command.
- 2. We have learnt about applying aggregate functions in my sql.
- **3.** We have learnt about applying conditions on tables.

Evaluation Grid:

| Sr. No. | Parameters | Maximum Marks | Marks Obtained |
|------------|---|---------------------------------|----------------|
| 1. | Worksheet completion including writing learning objectives/Outcomes. (To be submitted at the end of the day). | 8 | |
| 2. | Viva Voce | 10 | |
| 3. | Student Engagement in Simulation/Demonstration/Performance and Controls | 12 | |
| | Signature of Faculty (with Date): | Total Marks Obtained out of 30: | |