Ex. No. : 5
Date: 27/01/2023
SELECT with various clause – BETWEEN, IN, Aggregate function

IN & BETWEEN

1.   List the type of the courses "Statistics" and "Programming"

```
mysql> select CourseType from course where CourseDesc in ("Statistics", "Probability");
+------------+
| CourseType |
+------------+
| T          |
| T          |
+------------+
2 rows in set (0.00 sec)
```

2.   The instructor wants to know the CourseNos whose scores are in the range 50
to 80

```
mysql> select CourseNo from student where Score between 50 and 80;
+----------+
| CourseNo |
+----------+
| C003     |
| C003     |
| C002     |
| C001     |
| C002     |
| C021     |
| C021     |
+----------+
7 rows in set (0.00 sec)
```

AGGREGATE

1.   Find the average mark of "C002".

```
mysql> select avg(Score) from student where CourseNo="C002";
+------------+
| avg(Score) |
+------------+
|    65.0000 |
+------------+
1 row in set (0.00 sec)
```

2.   List the maximum, minimum mark for "C021"

```
mysql> select max(Score) from student where CourseNo="C021";
+------------+
| max(Score) |
+------------+
|         80 |
+------------+
1 row in set (0.00 sec)

mysql> select min(Score) from student where CourseNo="C021";
+------------+
| min(Score) |
+------------+
|         75 |
+------------+
1 row in set (0.00 sec)
```

3.   List the maximum, minimum, average mark for each subject in 5th semester

```
mysql> select min(Score) "Minimum in Sem 5" from student where Semester=5;
+------------------+
| Minimum in Sem 5 |
+------------------+
|               70 |
+------------------+
1 row in set (0.00 sec)
mysql> select max(Score) "Maximum in Sem 5" from student where Semester=5;
+------------------+
| Maximum in Sem 5 |
+------------------+
|               80 |
+------------------+
1 row in set (0.00 sec)
mysql> select avg(Score) "Average in Sem 5" from student where Semester=5;
+------------------+
| Average in Sem 5 |
+------------------+
|          75.0000 |
+------------------+
1 row in set (0.00 sec)
```

4.   List the name of the courses and average mark of each courses.

```
+------------+---------+
| CourseDesc | Average |
+------------+---------+
| English    |      99 |
| Maths      |      75 |
| Science    |      85 |
+------------+---------+
3 rows in set (0.00 sec)
```

```
mysql> select avg(Average) "Average" from course1;
+-------------------+
| Average           |
+-------------------+
| 86.33333333333333 |
+-------------------+
1 row in set (0.00 sec)
```

5.   Calculate the sum of all the scores.

```
mysql> select sum(Average) "Sum" from course1;
+------+
| Sum  |
+------+
|  259 |
+------+
1 row in set (0.00 sec)
```

6.   How many students are registered for each course? Display the
course description and the number of students registered in each course.

7.   How many courses did each student register for? Use Assessment table.