# TASK 3

Using Clauses, Operators and Functions in queries

## Aim:

To perform the query processing on databases for different retrieval results of queries using DML, DRL operations using aggregate, date, string, indent functions, set clauses and operators.

Topic: University Database System

• To retrieve the location of a particular event conducted by its EventID

• To retrieve the Students detail whose name start with ‘A’.

• Add a column Major and GPA in Student table.

• To count the number of students enrolled in Computer Science department.

• To display the Department details for the DeptIDs 'D01', 'D03', and 'D06'.

• To select the names and IDs of students who have GPA greater than 8.

• To find the FacultyID of faculties who have not handled any course.

## University Tables

Department:

DeptID Name Location Contact\_No  
D01 Computer Science Block A 9988776699  
D02 Information Tech Block B 9977886699  
D03 Electronics Block C 9966886699  
D04 Mechanical Block D 9955886699  
D05 Civil Block E 9944886699  
D06 Biotech Block F 9933886699

Student:

StudentID DeptID FName LName Age DateofBirth Email Contact\_No Major GPA  
S01 D01 Aarav Kumar 20 21-JUN-2005 Aarav@gmail.com 9191910101 CSE 8.5  
S02 D01 Anu Raj 21 12-JUL-2004 Anuraj@gmail.com 9292920202 CSE 9.0  
S03 D02 Bala Devi 22 05-MAY-2003 Baladevi@gmail.com 9393930303 IT 8.2  
S04 D03 Karan Singh 23 14-APR-2002 Karan@gmail.com 9494940404 ECE 7.8  
S05 D04 Arjun M 22 17-MAR-2003 ArjunM@gmail.com 9595950505 MECH 8.6

Faculty:

FacultyID FName LName DeptID Email Contact\_No  
F01 Ravi S D01 ravis@gmail.com 8888811111  
F02 Meena K D02 meenak@gmail.com 8888822222  
F03 Surya R D03 suryar@gmail.com 8888833333

Course\_Assigned:

FacultyID CourseID DeptID  
F01 C101 D01  
F02 C202 D02

## Queries and Results

3.1: To retrieve the location of a particular event conducted by its EventID

SQL> SELECT Location FROM Event WHERE EventID='E03';  
Result:  
Location  
Main Auditorium

3.2: To retrieve the Students detail whose name start with ‘A’.

SQL> Select \* from Student where FName like 'A%';  
StudentID DeptID FName LName Age DateofBirth Email Contact\_No  
S01 D01 Aarav Kumar 20 21-JUN-2005 Aarav@gmail.com 9191910101  
S02 D01 Anu Raj 21 12-JUL-2004 Anuraj@gmail.com 9292920202  
S05 D04 Arjun M 22 17-MAR-2003 ArjunM@gmail.com 9595950505

3.3: Add a column Major and GPA in Student table.

SQL> Alter table Student add Major varchar(20);  
Table Altered  
SQL> Alter table Student add GPA number(3,1);  
Table Altered

3.4: To count the number of students enrolled in Computer Science department.

SQL> Select count(\*) from Student where DeptID='D01';  
Result:  
count(\*)  
2

3.5: To display the Department details for the DeptIDs 'D01', 'D03', and 'D06'.

SQL> Select \* from Department where DeptID in('D01','D03','D06');  
DeptID Name Location Contact\_No  
D01 Computer Science Block A 9988776699  
D03 Electronics Block C 9966886699  
D06 Biotech Block F 9933886699

3.6: To select the names and IDs of students who have GPA greater than 8.

SQL> Select StudentID, FName, LName from Student where GPA > 8;  
StudentID FName LName  
S01 Aarav Kumar  
S02 Anu Raj  
S05 Arjun M

3.7: To find the FacultyID of faculties who have not handled any course.

SQL> select a.FacultyID from Faculty a where FacultyID NOT IN(select FacultyID from Course\_Assigned);  
Result:  
FacultyID  
F03

## Result:

Thus the query processing on database for different retrieval result of query using Clauses, Operators and Functions in queries has been performed successfully.