

## PRACTICAL 9

### 9] Subqueries:

1. Simple subquery.(IN/ALL/EXIST)
  2. Nested subquery.
  3. Correlated subquery.
- 

```
SQL> DROP TABLE Course1439_9 CASCADE CONSTRAINTS;
Table dropped.

SQL> CREATE TABLE Student1439_9 (
  2      Stu_Id VARCHAR2(10) PRIMARY KEY,
  3      Stu_Name VARCHAR2(50),
  4      Course_Id VARCHAR2(10)
  5  );
Table created.

SQL>
SQL> CREATE TABLE Course1439_9 (
  2      Course_Id VARCHAR2(10) PRIMARY KEY,
  3      Course_Name VARCHAR2(50)
  4  );
Table created.

SQL> -- Students
SQL> INSERT INTO Student1439_9 VALUES ('S101', 'Rajesh', 'C001');
1 row created.

SQL> INSERT INTO Student1439_9 VALUES ('S102', 'Priya', 'C002');
1 row created.

SQL> INSERT INTO Student1439_9 VALUES ('S103', 'Aman', 'C003');
```

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```
3 row created.

SQL> INSERT INTO Student1439_9 VALUES ('S103', 'Aman',    'C003');

1 row created.

SQL> INSERT INTO Student1439_9 VALUES ('S104', 'Kajal',    NULL);

1 row created.

SQL>
SQL> -- Courses
SQL> INSERT INTO Course1439_9 VALUES ('C001', 'Database Systems');

1 row created.

SQL> INSERT INTO Course1439_9 VALUES ('C002', 'Java Programming');

1 row created.

SQL> INSERT INTO Course1439_9 VALUES ('C003', 'OS Fundamentals');

1 row created.

SQL> INSERT INTO Course1439_9 VALUES ('C004', 'Computer Networks');

1 row created.

SQL>
SQL> SELECT * FROM Student1439_9;

STU_ID      STU_NAME                                COURSE_ID
-----      -----
S101        Rajesh                                 C001
S102        Priya                                 C002
S103        Aman                                  C003
S104        Kajal                                 C004

SQL> SELECT * FROM Course1439_9;

COURSE_ID   COURSE_NAME
-----      -----
C001        Database Systems
C002        Java Programming
C003        OS Fundamentals
C004        Computer Networks

SQL> SELECT S.Stu_Name, C.Course_Name
  2  FROM Student1439_9 S
  3  LEFT JOIN Course1439_9 C
  4  ON S.Course_Id = C.Course_Id;

STU_NAME
-----
Rajesh
Database Systems.

Priya
Java Programming

Aman
OS Fundamentals

STU_NAME
-----
COURSE_NAME
-----
Kajal

SQL> SELECT S.Stu_Name, C.Course_Name
  2  FROM Student1439_9 S
  3  RIGHT JOIN Course1439_9 C
  4  ON S.Course_Id = C.Course_Id;

STU_NAME
-----
COURSE_NAME
-----
Rajesh
Database Systems
```

## PRACTICAL 9

```
Priya
Java Programming
```

```
Aman
OS Fundamentals
```

```
STU_NAME
```

```
-----
```

```
COURSE_NAME
```

```
-----
```

```
Computer Networks
```

```
SQL> SELECT S.Stu_Name, C.Course_Name
  2  FROM Student1439_9 S
  3  FULL OUTER JOIN Course1439_9 C
  4  ON S.Course_Id = C.Course_Id;
```

```
STU_NAME
```

```
-----
```

```
COURSE_NAME
```

```
-----
```

```
Rajesh
Database Systems
```

```
Priya
Java Programming
```

```
Aman
OS Fundamentals
```

```
STU_NAME
```

```
-----
```

```
COURSE_NAME
```

```
-----
```

```
Computer Networks
```

```
Kajal
```