EXPERIMENT-7

AIM: Write SQL queries to perform JOIN OPERATIONS (i.e. CONDITIONAL JOIN, EQUI JOIN,LEFT OUTER JOIN, RIGHT OUTER JOIN, FULL OUTER JOIN)

CREATING TABLE student :

```
  1   CREATE TABLE student(
  2   name VARCHAR(10),
  3   roll_no NUMBER,
  4   dept VARCHAR(10),
  5   PRIMARY KEY(name)
  6*   )
SQL-CSE530>/

Table created.
```

Inserting tables into student table :

```
SQL-CSE530>INSERT INTO student VALUES ('Jagadeesh',530,'CSE');

1 row created.

SQL-CSE530>INSERT INTO student VALUES ('Bindu',529,'CSE');

1 row created.

SQL-CSE530>INSERT INTO student VALUES ('Jagan',531,'CSE');

1 row created.

SQL-CSE530>INSERT INTO student VALUES ('Arif',506,'CSM');

1 row created.
```

```
SQL-CSE530>SELECT * FROM student;

NAME              ROLL_NO DEPT
---------- ---------- ----------
Jagadeesh            530 CSE
Bindu                529 CSD
Jagan                531 ECE
Arif                 506 CSM
```

Creating table Library :

```
SQL-CSE530>CREATE TABLE library(
  2   roll_no NUMBER,
  3   book VARCHAR(10)
  4   );

Table created.
```

Inserting values into library table :

```
SQL-CSE530>INSERT INTO library VALUES (530,'DBMS');

1 row created.

SQL-CSE530>INSERT INTO library VALUES (531,'JAVA');

1 row created.

SQL-CSE530>INSERT INTO library VALUES (537,'MATHS');

1 row created.

SQL-CSE530>INSERT INTO library VALUES (528,'SE');

1 row created.
```

```
SQL-CSE530>SELECT * FROM library;

    ROLL_NO BOOK
---------- ----------
       530 DBMS
       531 JAVA
       537 MATHS
       528 SE
```

CONDITIONAL JOIN :

```
SQL-CSE530>SELECT * FROM student JOIN library on student.roll_no =library.roll_no;

NAME          ROLL_NO DEPT          ROLL_NO BOOK
---------- ---------- ---------- ---------- ----------
Jagadeesh         530 CSE               530 DBMS
Jagan             531 ECE               531 JAVA
```

EQUI JOIN :

```
SQL-CSE530>SELECT * FROM student JOIN library USING (roll_no);

   ROLL_NO NAME       DEPT       BOOK
---------- ---------- ---------- ----------
       530 Jagadeesh  CSE        DBMS
       531 Jagan      ECE        JAVA
```

NATURAL LEFT OUTER JOIN :

```
SQL-CSE530>SELECT * FROM student NATURAL LEFT OUTER JOIN LIBRARY;

   ROLL_NO NAME       DEPT       BOOK
---------- ---------- ---------- ----------
       530 Jagadeesh  CSE        DBMS
       531 Jagan      ECE        JAVA
       506 Arif       CSM
       529 Bindu      CSD
```

NATURAL RIGHT OUTER JOIN :

```
SQL-CSE530>SELECT * FROM student NATURAL RIGHT OUTER JOIN LIBRARY;

   ROLL_NO NAME        DEPT        BOOK
---------- ---------- ---------- ----------
       530 Jagadeesh  CSE         DBMS
       531 Jagan      ECE         JAVA
       528                        SE
       537                        MATHS
```

NATURAL FULL OUTER JOIN :

```
SQL-CSE530>SELECT * FROM student NATURAL FULL OUTER JOIN LIBRARY;

   ROLL_NO NAME        DEPT        BOOK
---------- ---------- ---------- ----------
       530 Jagadeesh  CSE         DBMS
       531 Jagan      ECE         JAVA
       537                        MATHS
       528                        SE
       506 Arif       CSM
       529 Bindu      CSD
```