

EXPERIMENT-6

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 :

```
SQL> CREATE TABLE student10(  
  2  name varchar(10),  
  3  roll_no number,  
  4  dept varchar(10),  
  5  primary key(name)  
  6  );
```

Table created.

Inserting tables into student table :

```
SQL> INSERT INTO student10 VALUES('SHIVA',531,'CSE');
```

1 row created.

```
SQL> INSERT INTO student10 VALUES('MOUNIKA',532,'CSE');
```

1 row created.

```
SQL> SELECT * FROM student10;
```

NAME	ROLL_NO	DEPT
SHIVA	531	CSE
MOUNIKA	532	CSE
JAGAN	530	CSE
ARJUN	505	CSE

```
SQL> CREATE TABLE library(  
2  roll_no number,  
3  book varchar(10)  
4  );
```

Table created.

```
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

```
SQL> SELECT * FROM student10 JOIN library on student10.roll_no = library.roll_no;
```

NAME	ROLL_NO	DEPT	ROLL_NO	BOOK
SHIVA	531	CSE	531	DBMS
MOUNIKA	532	CSE	532	JAVA
JAGAN	530	CSE	530	MATHS
ARJUN	505	CSE	505	SE

EQUI JOIN :

```
SQL> SELECT * FROM student10 JOIN library USING (roll_no);
```

ROLL_NO	NAME	DEPT	BOOK
531	SHIVA	CSE	DBMS
532	MOUNIKA	CSE	JAVA
530	JAGAN	CSE	MATHS
505	ARJUN	CSE	SE

NATURAL LEFT OUTER JOIN :

```
SQL> SELECT * FROM student10 NATURAL LEFT OUTER JOIN library ;
```

ROLL_NO	NAME	DEPT	BOOK
531	SHIVA	CSE	DBMS
532	MOUNIKA	CSE	JAVA
530	JAGAN	CSE	MATHS
505	ARJUN	CSE	SE

NATURAL RIGHT OUTER JOIN :

```
SQL> SELECT * FROM student10 NATURAL RIGHT OUTER JOIN library ;
```

ROLL_NO	NAME	DEPT	BOOK
531	SHIVA	CSE	DBMS
532	MOUNIKA	CSE	JAVA
530	JAGAN	CSE	MATHS
505	ARJUN	CSE	SE

NATURAL FULL OUTER JOIN :

```
SQL> SELECT * FROM student10 NATURAL FULL OUTER JOIN library ;
```

ROLL_NO	NAME	DEPT	BOOK
531	SHIVA	CSE	DBMS
532	MOUNIKA	CSE	JAVA
530	JAGAN	CSE	MATHS
505	ARJUN	CSE	SE