Experiment No. 9

```
SQL> create table instInfo(id int, name varchar(20), age int,city varchar(20));
Table created.
SQL> insert into instInfo values(1, 'prathamesh', 20, 'karad');
1 row(s) inserted.
SQL> insert into instInfo values(2, 'nikhil', 21, 'karad');
1 row(s) inserted.
SQL> insert into instInfo values(3, 'sumit', 21, 'karad');
1 row(s) inserted.
SQL> create table instBranch(id int, branch varchar(20), subject varchar(20));
Table created.
SQL> insert into instBranch values (1, 'Cse', 'Dbms');
1 row(s) inserted.
SQL> insert into instBranch values (2, 'Cse', 'Os');
1 row(s) inserted.
SQL> insert into instBranch values (3, 'Cse', 'ML');
1 row(s) inserted.
  SQL> select * from instlnfo;
ID
        NAME
                   AGE CITY
     prathamesh 20 karad
 1
 2
       nikhil
                    21
                         karad
        sumit
                         karad
 3
                    21
  SQL> select * from InstBranch;
ID BRANCH SUBJECT
             Dbms
    Cse
1
2
    Cse
             0s
3
    Cse
             ML
  SQL> select *from instInfo natural join instBranch;
   ID
             NAME
                           AGE
                                               BRANCH
                                                             SUBJECT
                                     CITY
   1
          prathamesh
                            20
                                    karad
                                                  Cse
                                                              Dbms
   2
             nikhil
                            21
                                    karad
                                                  Cse
                                                                Os
                                                               ML
   3
             sumit
                            21
                                    karad
                                                  Cse
```

SQL> select *from instlnfo left outer join instlnfo.id=instBranch.id;

| ID | NAME | AGE | CITY | ID | BRANCH | SUBJECT |
|----|------------|-----|--------|----|------------|----------------|
| 1 | prathamesh | 20 | karad. | 1 | Cse. | Dbms. |
| 2 | nikbil | 21 | karad. | 2 | Cse. | Q ₅ |
| 3 | sumit. | 21 | karad. | 3 | <u>Cse</u> | ML |

SQL> select *from instlnfo right outer join instlnfo.id=instBranch.id;

| ID | NAME | AGE | CITY | ID | BRANCH | SUBJECT |
|----|------------|-----|--------|----|--------|---------|
| 1 | prathamesh | 20 | karad. | 1 | Cse | Dbms. |
| 2 | nikbil | 21 | karad | 2 | Cse. | Qs |
| 3 | sumit | 21 | karad | 3 | Cse, | ML |

select *from instlnfo.full outer join instlnfo.id-instBranch.id;

| ID | NAME | AGE | CITY | ID | BRANCH | SUBJECT |
|----|------------|-----|--------|----|------------|---------|
| 1 | prathamesh | 20 | karad. | 1 | Cse. | Dbms |
| 2 | oikbil | 21 | karad | 2 | Cse. | Q5 |
| 3 | sumit. | 21 | karad. | 3 | <u>Cse</u> | ML |

select *from instlnfo cross join instBranch;

| ID | NAME | AGE | CITY | ID | BRANCH | SUBJECT |
|----|------------|-----|-------|----|--------|----------------|
| 1 | prathemesh | 20 | karad | 1 | Cse | Dbms |
| 1 | prathamesh | 20 | karad | 2 | Cse, | Q ₅ |
| 1 | prathamesh | 20 | karad | 3 | Cse. | ML |
| 2 | nikbil | 21 | karad | 1 | Cse, | Dbms |
| 2 | nikhil | 21 | karad | 2 | Cse, | Q ₅ |
| 2 | nikhil | 21 | karad | 3 | Cse. | ML |
| 3 | sumit | 21 | karad | 1 | Cse. | Dbms |
| 3 | sumit | 21 | karad | 2 | Cse. | Qs |
| 3 | sumit. | 21 | karad | 3 | Cse, | ML |

SQL> select *from instlnfo inner join instlnfo.id=instBranch.id;

| ID | NAME | AGE | CITY | ID | BRANCH | SUBJECT |
|--------|------------------|----------|----------------|--------|------------|-------------|
| 1 | prathamesh | 20 | karad | 1 | Cse. | Dbms |
| 2 3 | nikbil sumit. | 21 21 | karad karad | 2 3 | Cse Cse | Q5 ML |