

```
create table course
```

```
(
```

```
  course_code varchar(7),
```

```
  course_name varchar(10)
```

```
)
```

```
insert into course values ('CAP200','DBMS')
```

```
insert into course values ('CAP280','DBMS lab')
```

```
insert into course values ('CAP189','Compression')
```

```
insert into course values ('CAP189','DataComp')
```

| COURSE_CODE | COURSE_NAME |
|-------------|-------------|
| CAP200      | DBMS        |
| CAP280      | DBMS lab    |
| CAP189      | DataComp    |

```
create table details
```

```
(
```

```
  course_code varchar(7),
```

```
  semester varchar(10)
```

```
)
```

```
insert into details values ('CAP200','3rd')
```

```
insert into details values ('CAP280','2nd')
```

insert into details values ('CAP119','1st')

| COURSE_CODE | SEMESTER |
|-------------|----------|
| CAP119      | 1st      |
| CAP200      | 3rd      |
| CAP280      | 2nd      |

Cartesian Join

select \* from course,details

| COURSE_CODE | COURSE_NAME | COURSE_CODE | SEMESTER |
|-------------|-------------|-------------|----------|
| CAP200      | DBMS        | CAP119      | 1st      |
| CAP280      | DBMS lab    | CAP119      | 1st      |
| CAP189      | DataComp    | CAP119      | 1st      |
| CAP200      | DBMS        | CAP200      | 3rd      |
| CAP280      | DBMS lab    | CAP200      | 3rd      |
| CAP189      | DataComp    | CAP200      | 3rd      |
| CAP200      | DBMS        | CAP280      | 2nd      |
| CAP280      | DBMS lab    | CAP280      | 2nd      |
| CAP189      | DataComp    | CAP280      | 2nd      |

Self Join

select \* from course a,course b

| COURSE_CODE | COURSE_NAME | COURSE_CODE | COURSE_NAME |
|-------------|-------------|-------------|-------------|
| CAP200      | DBMS        | CAP200      | DBMS        |
| CAP200      | DBMS        | CAP280      | DBMS lab    |
| CAP200      | DBMS        | CAP189      | DataComp    |
| CAP280      | DBMS lab    | CAP200      | DBMS        |
| CAP280      | DBMS lab    | CAP280      | DBMS lab    |
| CAP280      | DBMS lab    | CAP189      | DataComp    |
| CAP189      | DataComp    | CAP200      | DBMS        |
| CAP189      | DataComp    | CAP280      | DBMS lab    |
| CAP189      | DataComp    | CAP189      | DataComp    |

## Natural Join

select \* from course natural join details

| COURSE_CODE | COURSE_NAME | SEMESTER |
|-------------|-------------|----------|
| CAP200      | DBMS        | 3rd      |
| CAP280      | DBMS lab    | 2nd      |

## Inner Join

select \* from course c inner join details d on c.course\_code=d.course\_code

| COURSE_CODE | COURSE_NAME | COURSE_CODE | SEMESTER |
|-------------|-------------|-------------|----------|
| CAP200      | DBMS        | CAP200      | 3rd      |
| CAP280      | DBMS lab    | CAP280      | 2nd      |

## Equi Join

select \* from course c, details d where c.course\_code=d.course\_code

| COURSE_CODE | COURSE_NAME | COURSE_CODE | SEMESTER |
|-------------|-------------|-------------|----------|
| CAP200      | DBMS        | CAP200      | 3rd      |
| CAP280      | DBMS lab    | CAP280      | 2nd      |

## Left outer Join

select \* from course c left outer join details d on c.course\_code=d.course\_code

| COURSE_CODE | COURSE_NAME | COURSE_CODE | SEMESTER |
|-------------|-------------|-------------|----------|
| CAP200      | DBMS        | CAP200      | 3rd      |
| CAP280      | DBMS lab    | CAP280      | 2nd      |
| CAP189      | DataComp    | -           | -        |

## Right outer join

select \* from course c right outer join details d on c.course\_code=d.course\_code

| COURSE_CODE | COURSE_NAME | COURSE_CODE | SEMESTER |
|-------------|-------------|-------------|----------|
| CAP200      | DBMS        | CAP200      | 3rd      |
| CAP280      | DBMS lab    | CAP280      | 2nd      |
| -           | -           | CAP119      | 1st      |

Full outer join

```
select * from course c full outer join details d on c.course_code=d.course_code
```

| COURSE_CODE | COURSE_NAME | COURSE_CODE | SEMESTER |
|-------------|-------------|-------------|----------|
| CAP200      | DBMS        | CAP200      | 3rd      |
| CAP280      | DBMS lab    | CAP280      | 2nd      |
| CAP189      | DataComp    | -           | -        |
| -           | -           | CAP119      | 1st      |

View

```
create view v as (select * from course natural join details)
```

```
select * from v
```

| COURSE_CODE | COURSE_NAME | SEMESTER |
|-------------|-------------|----------|
| CAP200      | DBMS        | 3rd      |
| CAP280      | DBMS lab    | 2nd      |

```
create view v1 as (select c.course_code,course_name,semester from course c full outer join details d on c.course_code=d.course_code)
```

```
select * from v1
```

| COURSE_CODE | COURSE_NAME | SEMESTER |
|-------------|-------------|----------|
| CAP200      | DBMS        | 3rd      |
| CAP280      | DBMS lab    | 2nd      |
| CAP189      | DataComp    | -        |
| -           | -           | 1st      |