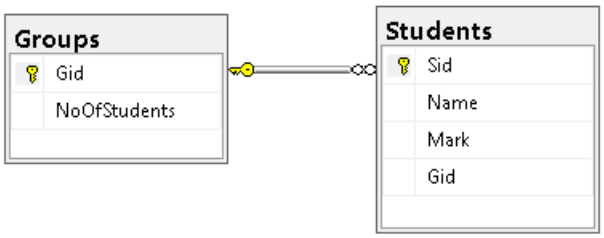
Examples




```
USE Lab2E
go

CREATE TABLE Groups(
Gid int primary key,
NoOfStudents int)

CREATE TABLE Students(
Sid int primary key,
Name varchar(50),
Mark float,
Gid int foreign key references Groups(Gid))

insert into Groups values (921, 28), (922, 27), (923, 28)
insert into Students values (1, 'Paul', 10, 921), (2, 'Cristi', 9, 921),
(3, 'Tania', 8, 923), (4, 'Daniel', 9, 922)

select * from Groups
select * from Students
```

Results | Messages

	Gid	NoOfStudents
1	921	28
2	922	27
3	923	28

	Sid	Name	Mark	Gid
1	1	Paul	10	921
2	2	Cristi	9	921
3	3	Tania	8	923
4	4	Dan...	9	922

-- the Groups with the students that have the Mark>5

```
SELECT s.Gid, s.Mark
FROM Groups g INNER JOIN Students s ON g.Gid=s.Gid
WHERE Mark>5
```

```
SELECT s.Gid, s.Mark
FROM Students s
WHERE Mark>5 and s.Gid IN (SELECT g.Gid FROM Groups g)
```

```
SELECT s.Gid, s.Mark
FROM Students s
WHERE Mark>5 and EXISTS (SELECT * FROM Groups g
                         WHERE g.Gid=s.Gid)
```

```
SELECT A.Gid, A.Mark
FROM (SELECT g.Gid, s.Name, s.Mark
        FROM Groups g INNER JOIN Students s ON g.Gid=s.Gid
        WHERE Mark>5) A
```

Results | Messages

	Gid	Mark
1	921	10
2	921	9
3	923	8
4	922	9

ANY – ALL

ALL – all records check the condition
ANY – at least one record check the condition

```sql
-- > all  - equivalent with MAX
SELECT s.Name, s.Mark
FROM Students s
WHERE s.Mark>ALL(SELECT s1.Mark
                 FROM Students s1
                 WHERE s.Sid=s1.Sid)

SELECT s.Name, s.Mark
FROM Students s
WHERE s.Mark>(SELECT MAX(s1.Mark)
              FROM Students s1
              WHERE s.Sid=s1.Sid)
```

Results Messages

Name	Mark

Name	Mark

```sql
-- any <  - equivalent with MIN
SELECT s.Name, s.Mark
FROM Students s
WHERE s.Mark<ANY(SELECT s1.Mark
                 FROM Students s1
                 WHERE s.Sid=s1.Sid)

SELECT s.Name, s.Mark
FROM Students s
WHERE s.Mark<(SELECT MIN(s1.Mark)
              FROM Students s1
              WHERE s.Sid=s1.Sid)
```

Results Messages

Name	Mark

Name	Mark

```sql
-- <> all  - equivalent with NOT IN
SELECT s.Name, s.Mark
FROM Students s
WHERE s.Mark<>ALL(SELECT s1.Mark
                  FROM Students s1
                  WHERE s.Sid=s1.Sid)

SELECT s.Name, s.Mark
FROM Students s
WHERE s.Mark NOT IN (SELECT s1.Mark
                     FROM Students s1
                     WHERE s.Sid=s1.Sid)
```

Results Messages

Name	Mark

Name	Mark

```sql
-- any = equivalent with IN
SELECT s.Name, s.Mark
FROM Students s
WHERE s.Mark=ANY(SELECT s1.Mark
                 FROM Students s1
                 WHERE s.Sid=s1.Sid)

SELECT s.Name, s.Mark
FROM Students s
WHERE s.Mark IN (SELECT s1.Mark
                 FROM Students s1
                 WHERE s.Sid=s1.Sid)
```

Results Messages

	Name	Mark
1	Paul	10
2	Cristi	9
3	Tania	8
4	Daniel	9

	Name	Mark
1	Paul	10
2	Cristi	9
3	Tania	8
4	Daniel	9