



VIT[®]
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

SWE1004 - (L 9 + L10)

Lab Sheet 7 (II)

Subqueries

Set Membership, Set operations, Set Comparison, Test for empty relations

Table instances

SQL> select * from STUD_21mia1119;

```
SQL> select * from STUD_21mia1119;
```

REGNO	NAME	CGPA
101	SAI	7.3
102	JAI	8.2
103	ANN	8.9

SQL> select * from STUD_hobby_21mia1119;

```
SQL> select * from STUD_hobby_21mia1119;
```

REGNO	HOBBY
101	reading
102	playing
103	singing

1. Set Membership - in, not in
2. Set Comparison - some, all
3. Test for empty relations - exists, not exists
4. Set operations - union, intersect, minus

Membership - in

- 1) Q. list the student details whose hobby is 'playing'

```
SQL> select*from STUD_21mia1119 where REGNO in(select REGNO from STUD_hobby_21mia1119 where hobby='playing');
```

REGNO	NAME	CGPA
102	JAI	8.2

- 2) Q. list the student details whose hobby is not 'playing'

```
SQL> select*from STUD_21mia1119 where REGNO not in(select REGNO from STUD_hobby_21mia1119 where hobby='playing');
```

REGNO	NAME	CGPA
101	SAI	7.3
103	ANN	8.9

Union:

- 3) Q. List the student details who has academic or hobby information

Set Operations:

```
SQL> select regno from stu_21m1a1110 union select regno from stu_hobby_21m1a1110;
```

REGNO
101
102
103
104
105
106

6 rows selected.

Intersection:

- 4) Q. List the student details who has academic and hobby information

```
SQL> select regno from stu_21m1a1110 intersect select regno from stu_hobby_21m1a1110;
```

REGNO
101
102
103
104

Set Difference:

- 5) Q. List the student details who has academic but not hobby information

```
SQL> select regno from stu_21m1a1110 minus select regno from stu_hobby_21m1a1110;
```

REGNO
106

Set Difference:

- 6) Q. List the student details who has hobby but not academic information

```
SQL> select regno from stu_hobby_21m1a1110 minus select regno from stu_21m1a1110;
```

REGNO
106

Some, all, any

- 7) Q. List the student details who have scored more cgpa greater than atleast one student

- 8) Q. List the student details who have scored more cgpa greater than all the students

```
SQL> select * from stu_21mia118 where cgpa>all(select cgpa from stu_21mia118);  
no rows selected
```

- 9) Q. List the student details who have scored maximum cgpa

REGNO	NAME	CGPA
104	raj	9.9

```
SQL> select * from stu_21mia118 where exists(select regno from stu_21mia118 where regno=105);  
no rows selected
```

- 12) Q. list the details if there does not exists a regno 105

REGNO	NAME	CGPA
101	sai	7.3
102	jai	8.2
103		8.9
104	raj	9.9
106	david	9.5

- 13) Q. list the details if there exists a cgpa 9

```
no rows selected
```

- 14) Q. update the cgpa of all students, if he has a hobby;