**SET OPERATIONS**

SQL> create table z(id number(10),name varchar(10));

Table created.

SQL> insert into z values(1,'a');

1 row created.

SQL> insert into z values(2,'b');

1 row created.

SQL> create table z1(id number(10),name varchar(10));

Table created.

SQL> insert into z1 values(2,'b');

1 row created.

SQL> insert into z1 values(3,'c');

1 row created.

SQL> insert into z1 values(4,'d');

1 row created.

SQL> select \* from z;

ID NAME

---------- ----------

1 a

2 b

SQL> select \* from z1;

ID NAME

---------- ----------

2 b

3 c

4 d

SQL> select \* from z union select \* from z1;

ID NAME

---------- ----------

1 a

2 b

3 c

4 d

SQL> select \* from z union all select \* from z1;

ID NAME

---------- ----------

1 a

2 b

2 b

3 c

4 d

SQL> select \* from z intersect select \* from z1;

ID NAME

---------- ----------

2 b

SQL> select \* from z minus select \* from z1;

ID NAME

---------- ----------

1 a

SQL> select \* from z1 minus select \* from z;

ID NAME

---------- ----------

3 c

4 d

**In and not in**

SQL> create table student(id number(10),name varchar(10),attper number(10));

Table created.

SQL> insert into student values(1,'a',80);

1 row created.

SQL> insert into student values(2,'b',75);

1 row created.

SQL> insert into student values(3,'c',90);

1 row created.

SQL> insert into student values(4,'d',88);

1 row created.

SQL> insert into student values(5,'e',90);

1 row created.

SQL> select \* from student;

ID NAME ATTPER

---------- ---------- ----------

1 a 80

2 b 75

3 c 90

4 d 88

5 e 90

SQL> select id,name,attper from student where attper in(75,80,90);

ID NAME ATTPER

---------- ---------- ----------

1 a 80

2 b 75

3 c 90

5 e 90

SQL> select id,name,attper from student where attper=75 or attper=80 or attper=90;

ID NAME ATTPER

---------- ---------- ----------

1 a 80

2 b 75

3 c 90

5 e 90

SQL> alter table student add(elective varchar(10));

Table altered.

SQL> update student set elective='sml' where id=1;

1 row updated.

SQL> select \* from student;

ID NAME ATTPER ELECTIVE

---------- ---------- ---------- ----------

1 a 80 sml

2 b 75

3 c 90

4 d 88

5 e 90

SQL> update student set elective='sml' where id=2;

1 row updated.

SQL> update student set elective='dl' where id=3;

1 row updated.

SQL> update student set elective='dl' where id=4;

1 row updated.

SQL> update student set elective='gaa' where id=4;

1 row updated.

SQL> select \* from student;

ID NAME ATTPER ELECTIVE

---------- ---------- ---------- ----------

1 a 80 sml

2 b 75 sml

3 c 90 dl

4 d 88 gaa

5 e 90

SQL> update student set elective='dl' where id=5;

1 row updated.

SQL>

SQL> select \* from student;

ID NAME ATTPER ELECTIVE

---------- ---------- ---------- ----------

1 a 80 sml

2 b 75 sml

3 c 90 dl

4 d 88 gaa

5 e 90 dl

SQL> select \* from student where elective not in('gaa');

ID NAME ATTPER ELECTIVE

---------- ---------- ---------- ----------

1 a 80 sml

2 b 75 sml

3 c 90 dl

5 e 90 dl

SQL> select \* from student where elective in('gaa');

ID NAME ATTPER ELECTIVE

---------- ---------- ---------- ----------

4 d 88 gaa

**Is null and is not null**

SQL> insert into student values(6,'f',89,null);

1 row created.

SQL> select \* from student;

ID NAME ATTPER ELECTIVE

---------- ---------- ---------- ----------

1 a 80 sml

2 b 75 sml

3 c 90 dl

4 d 88 gaa

5 e 90 dl

6 f 89

6 rows selected.

SQL> select id,name from student where elective is null;

ID NAME

---------- ----------

6 f

SQL> select id,name from student where elective is not null;

ID NAME

---------- ----------

1 a

2 b

3 c

4 d

5 e

**And operator and or**

select \* from student where attper<90 and elective='sml';

ID NAME ATTPER ELECTIVE

---------- ---------- ---------- ----------

1 a 80 sml

2 b 75 sml

SQL> select \* from e where attper>90 or elective='sml';

ID NAME ATTPER ELECTIVE

---------- ---------- ---------- ----------

1 a 80 sml

2 b 75 sml

SQL> select \* from e where attper>=75 or elective='sml';

ID NAME ATTPER ELECTIVE

---------- ---------- ---------- ----------

1 a 80 sml

2 b 75 sml

3 c 90 dl

4 d 88 gaa

5 e 90 im

6 f 78 im

6 rows selected.

**Like operator**

SQL> select name from e where elective like 'sml';

NAME

----------

a

b

SQL> select name from e where elective like '%l';

NAME

----------

a

b

c

SQL> select name from e where elective like 'i%';

NAME

----------

e

f

SQL> select name from e where elective like '%m%';

NAME

----------

a

b

e

f

SQL> select name from e where elective like '\_m%';

NAME

----------

a

b

e

f

SQL> select name from e where elective like 's\_%';

NAME

----------

a

b

SQL> select name from e where elective like 's%l';

NAME

----------

a

b

SQL> select name from e where elective not like '%l';

NAME

----------

d

e

f

SQL> select \* from e where attper between 80 and 89;

ID NAME ATTPER ELECTIVE

---------- ---------- ---------- ----------

1 a 80 sml

4 d 88 gaa

SQL> select \* from e where attper not between 80 and 89;

ID NAME ATTPER ELECTIVE

---------- ---------- ---------- ----------

2 b 75 sml

3 c 90 dl

5 e 90 im

6 f 78 im