

## \* Set operations -

set operation combine the result of two more component queries into 1 result.

Queries containing set operation are called compound queries.

following table shows various operators.

operator	Returns
union	all distinct rows selected by the query
union all	All rows selected by the query includes all duplicates
Intersect	All distinct rows selected by both queries
Minus/ except	All distinct rows that are selected by first select statement are not selected in 2nd select statement.

Consider follo. d/b.

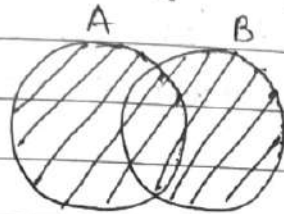
Depositor

cname	accno
John	1001
Sita	1002
Vishal	1003
Ram	1004

Borrower

cname	loan no
John	2001
Tony	2002
Rohit	2003
Vishal	2004

- ① Union - The union operator returns all rows selected by the query. Use the union operator to return all rows from multiple tables & eliminate any duplicate row.



e.g. Find all customers who have a loan or account or both at the bank.

SQL> select cname from depositor  
union

select cname from borrower; ↵

o/p -

cname
John
Sita
Vishal
Ram
Tony
Rohit.

If we want to retain all duplicates we must make use of "union all".

e.g. SQL> select cname  
from depositor  
union all

select cname  
from borrower; ↵

o/p

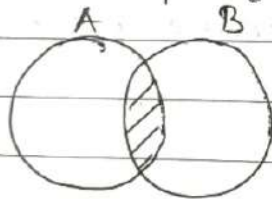
cname
John
Sita
Vishal
Ram
John
Tony
Rohit
Vishal

The restriction on using a union is as follows:

- i) No. of columns in all queries must be same
- ii) The datatype of the column in each query should be same.
- iii) Union cannot be used in subqueries
- iv) You cannot use aggregate function in union

## 2) Intersect -

The Intersect clause outputs only rows produced by both queries when intersected. The intersect operation returns common records from the o/p of both queries.



e.g. Find all customers who have an account & loan at the bank.

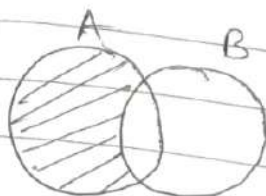
SQL) select cname from depositor  
intersect  
select cname from borrower;

o/p.

cname
John
Vishal

## 3) Minus/Except -

The minus operator puts rows that are in first table but not in the second table.



77)

e.g. ~~SQL~~ Find all customers who have an account but no loan at the bank.

SQL> select cname from depositor  
minus

select cname from borrower; ←

o/p.

cname
Ram
Sita