UNION

The SQL UNION clause/operator is used to combine/ concatenate the results of two or more SELECT statements without returning any duplicate rows and keeps unique records.

To use this UNION clause, each SELECT statement must have

↳ The same number of columns selected and expressions.

↳ The same data type and

↳ Have them in the same order.

Syntax

```
SELECT column_name FROM TableA
UNION
SELECT column_name FROM TableB
```

Example

```
SELECT cust_name, cust_amount from custA
UNION
SELECT cust_name, cust_amount from custB
```

UNION ALL

In UNION ALL everything is same as UNION, it combines / concatenate two or more table but keeps all records, including duplicates.

Syntax

```
SELECT column_name FROM TableA
UNION ALL
SELECT column_name FROM TableB
```

Example

```
SELECT cust_name, cust_amount from custA
UNIONALL
SELECT cust_name, cust_amount from custB
```

Table: custA

cust_name	cust_amount
Madan Mohan	2100
Gopi Nath	1200
Govind Dev	5000

Table: custB

cust_name	cust_amount
Gopal Bhat	1500
Madan Mohan	2100

SUB QUERY

A Subquery or Inner query or a Nested query allows us to create complex query on the output of another query.

↳ Sub query syntax involves two SELECT statements.

Syntax

```
SELECT column-name(s)
FROM table_name
WHERE column_name operator
  (SELECT column_name FROM table_name WHERE...
```

② Find the details of customers, whose payment amount is more than the average of total amount paid by all customers.

Divide above questions into two parts.

① Find the average amount.

```
SELECT amount AVG (amount) FROM Payment.
```

② Filter the customers whose amount > average amount.

where amount < (select avg (amount) from payment);