

## ASSIGNMENT

classmate

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→ SQL functions =

SQL provides many built-in functions to perform operations on data.

They are divided into 2 categories —

- a) Aggregate functions
- b) Built-in functions

I. Built-in functions = [Numeric, Date, String].

1) ABS() = returns the absolute value of the number given as expression.

Syntax → Select ABS(number);

eg → Select ABS(-26);

Output → Select ABS(26);

2) POWER() = returns the value of a number raised to the power of another number.

Syntax → Select POWER(base, exponent);

eg → Select POWER(6,3) → 216

3) CEIL() = returns the next integer value that is bigger than or = a number.

Syntax → Select CEIL(number);

eg → Select CEIL(369.33); → 370.

4) FLOOR() = returns the previous integer value that is smaller than or = a number.

eg → Select FLOOR(369.33); → 369.

5) ROUND() = Rounds a number to a specified number of decimal values.

Sinx → Select ROUND (number, decimals);

eg → Select ROUND (369.334, 1); → 369.34

= SELECT AVG(Salary) FROM customers;

⑥ TRUNCATE() = Truncate a number to a specified number of decimal places.

eg → Select TRUNCATE (number, decimal places to truncate);

eg → Select TRUNCATE (369.3343, 1);

→ 369.3

⑦ SQRT() = squareroot of a number.

eg → Select SQRT(36); → 6.

⑧ MIN() =

SELECT MIN(Salary) FROM customers;

⑨ MAX() =

SELECT MAX(Salary) FROM customers;

⑩ SUM() =

SELECT SUM(Salary) FROM customers;

⑪ RAND()

⇒ Date functions =

\* It returns a single value, calculated from values in the column.

\* eg →

id	name	salary
1	AK	10,000
2	BK	25,000
3	CK	30,000

⑫ NOW() = returning current date & time.

SELECT NOW();

⑬ CURDATE() = current date.

SELECT CURDATE();

⑭ CURRENT\_DATE() =

SELECT CURRENT\_DATE();

⑮ AVG() = returning the avg value of

⑯ DATE() = extract the date part of

date / date or time exp.

⇒ SQL String Functions =

String ()'s are used to perform an operation on input str to return an output str.

1) ASCII() = used to find the ASCII value of a char.

SELECT ASCII('t'); → 111.

2) CHAR\_LENGTH() = used to find the length of a word.

SELECT CHAR\_LENGTH('Hello'); → 5

3) CONCAT() = Add 2 words (strings);

SELECT CONCAT('ansar', 'ok');

4) INSERT() = Insert the data into a DB.

INSERT INTO datalibse (emp\_id, emp\_name)

VALUES (101, 'AK');

5) CASE() = to convert the given str to lowercase.

CASE ('HELLO'); → hello.

6) LEFT() = used to Retire a substring from

from the left of given size (has

SELECT LEFT ('helloworld', 5);

7) LENGTH() = length of a word.  
LENGTH ('Hello');

8) LOWER() = convert the uppercase & str into lowercase.

SELECT LOWER ('Hello'); → hello.

⇒ SET operation =

used to combine 2 or more SQL statements.

1) UNION =

used to combine the result of 2 or more SQL SELECT queries.

SQL → Select column-name from table 1

UNION

Select column-name from table 2;

2) UNION ALL =

If 'is' = UNION operation,  
Returns the set without removing  
duplicate & sorting the data.

→

SELECT column-name from table 1 UNION ALL

SELECT column-name from table 2;

3) INTERSECT =

used to combine 2 select statement  
Returns the common rows from both

True Select Statement's.

SQL →  
Select column from table1 INTERSECT  
Select column from table2;

4) MINUS =

combines the result of 2 select statements  
used to display the rows which are  
present in the first query but absent  
in the 2nd query.

SQL →

Select column from table1 MINUS.  
Select column from table2

⇒ CLAUSES in SQL =

SQL query provides with the following  
clauses that can be used in the select (5)

i) GROUP BY =

used to arrange identical data  
into groups with the help of some (15).

e.g. → if a particular column has some values  
in different rows then it will arrange  
these rows in a group.

sno	name	age	salary
1	AK	19	2000
2	BK	20	3000
3	KK	19	15000
4	AK	19	3500

name	Salary
AK	2000
BK	3000
KK	15000

2) HAVING =

we can use this clause to  
place conditions to decide which group  
will be part of final result set.

SELECT name, sum(salary) FROM employee  
GROUP BY name HAVING sum(salary) > 3000;

3) ORDER BY = used to sort the table.

SELECT \* FROM TABLENAME ORDERBY column,  
clauses that can be used in the select (5)

ASC clauses → Select \* from table\_name ORDER BY  
column ASC;

DESC clauses → Select \* from table\_name ORDER BY  
column DESC;