



Experiment 5: Implementation of Aggregate and Character Function

Aim: Implementation of Aggregate and Character Function

Theory:

Aggregative operators: In addition to simply retrieving data, we often want to perform some computation or summarization. SQL allows the use of arithmetic expressions. We now consider a powerful class of constructs for computing aggregate values such as MIN and SUM.

- 1. Count:** COUNT following by a column name returns the count of tuple in that column. If DISTINCT keyword is used then it will return only the count of unique tuple in the column. Otherwise, it will return count of all the tuples (including duplicates) count (*) indicates all the tuples of the column.

Syntax: COUNT (Column name)

Example: SELECT COUNT (Sal) FROM emp;

- 2. SUM:** SUM followed by a column name returns the sum of all the values in that column.

Syntax: SUM (Column name)

Example: SELECT SUM (Sal) From emp;

- 3. AVG:** AVG followed by a column name returns the average value of that column values.

Syntax: AVG (n1, n2...)

Example: Select AVG (10, 15, 30) FROM DUAL;

- 4. MAX:** MAX followed by a column name returns the maximum value of that column.

Syntax: MAX (Column name)

Example: SELECT MAX (Sal) FROM emp;

SQL> select deptno, max(sal) from emp group by deptno;

DEPTNO	MAX (SAL)
10	5000
20	3000
30	2850

SQL> select deptno, max (sal) from emp group by deptno having max(sal)<3000;

DEPTNO MAX(SAL)

— ———
30 2850

5. **MIN:** MIN followed by column name returns the minimum value of that column.

Syntax: MIN (Column name)

Example: SELECT MIN (Sal) FROM emp;

SQL>select deptno,min(sal) from emp group by deptno having min(sal)>1000;

DEPTNO MIN (SAL)

— ———
10 1300

CHARACTER FUNCTION:

initcap(char) : select initcap(“hello”) from dual; lower

(char): select lower (‘HELLO’) from dual; upper

(char) :select upper (‘hello’) from dual; ltrim

(char,[set]): select ltrim (‘cseit’, ‘cse’) from dual; rtrim

(char,[set]): select rtrim (‘cseit’, ‘it’) from dual;

replace (char,search): select replace(‘jack and jue’,‘j’,‘bl’) from dual;

Conclusion: To be written by students

LAB PRACTICE ASSIGNMENT:

Create a table EMPLOYEE with following schema:

(Emp_no, E_name, E_address, E_ph_no, Dept_no, Dept_name,Job_id, Designation , Salary)

Write SQL statements for the following query.

1. List the E_no, E_name, Salary of all employees working for MANAGER.
2. Display all the details of the employee whose salary is more than the Sal of any IT PROFF..

DATABASE MANAGEMENT SYSTEM(DBS198917)

3. List the employees in the ascending order of Designations of those joined after 1981.
4. List the employees along with their Experience and Daily Salary.
5. List the employees who are either 'CLERK' or 'ANALYST' .
6. List the employees who joined on 1-MAY-81, 3-DEC-81, 17-DEC-81,19-JAN-80 .
7. List the employees who are working for the Deptno 10 or20.
8. List the Enames those are starting with 'S' .
9. Display the name as well as the first five characters of name(s) starting with 'H'
10. List all the emps except 'PRESIDENT' & 'MGR" in asc order of Salaries.