Practical-5

Aim Perform the following

• Simple Queries
• Simple Queries with Aggregate functions
• Queries with Aggregate functions(group by and having clause)

Output :

• Simple Queries
SELECT command isused to retrievedata from a tables.
We can retrievecomplete tables,or partially mentioning conditions using WHERE clause.
DISTINCT keyword isusefulfor suppresses the duplicates.
BETWEEN condition isused to retrievevalues withina range ina Select, Insert,Delete,Update statement.
Like clause compares data with an expression using wildcard(%,_) operators.
Order by clause isused ina selectstatement to sort resultseitherin ascending or descending

order.

Syntax :

SELECT * FROM tablename
ORDER BY expr [ASC | DESC];

• Simple Queries with Aggregate functions
Aggregate functions perform a calculation on a
set of values and return a single value.

SUM FUNCTION :
This function returns the sum of a set of values.
And it ignores NULL values.
If no matching row found, SUM function returns
a NULL value.
For example :To get the total Salary of
employees from the table EMP, we can use the
SUM function.

Syntax :

SELECT SUM (aggregate expr)
FROM tables
[WHERE

condition];

AVG FUNCTION :
This function calculates the average value of a set of values.

Syntax :

SELECT AVG (aggregate expr)
FROM tables
[WHERE conditions];

MIN FUNCTION :
This function returns the minimum value in a set of values.

Syntax :
SELECT MIN (aggregate expr)
FROM tables
[WHERE conditions];

MAX FUNCTION :
This function returns the maximum value in a set of

values.

Syntax :
SELECT   MAX (aggregate expr)
FROM   tables
[WHERE   conditions];

COUNT   function returns the number of the rows
in a table.
For example, we can use the COUNT   function to
get the Salary of employees in the EMP   table as
the following query :

Syntax :

SELECT   COUNT   (aggregate expr)
FROM   tables
[WHERE   conditions];

• Queries with Aggregate functions(group by and
having clause)
Group by clause is used in a SELECT   statement,
when data from a table needs to be summarized
group

wise.

Syntax :

```
SELECT    expr1, expr2,...., exprn,
aggregate_function (expression)
FROM    tables
[WHERE    conditions]
GROUP    BY expr1, expr2,...., exprn;
```

Having clause isused in combination with the
GROUP   BY clause to restrict the groups of
returned rows to only those whose the condition
is 'TRUE'.

Syntax :

```
SELECT    expr1, expr2, ...., exprn,
aggregate_function(expression)
FROM    tables
[WHERE    conditions]
GROUP    BY expr1, epr2, ....,exprn
HAVING    condition;
```