

insert into department values

(1, 'CSE', 'Hyderabad'),
(2, 'ECE', 'Mumbai'),
(3, 'Mech', 'Delhi');

insert into student values

(101, upper('rahul'), 20, 1, 'hyderabad'),

insert into student values

(102, 'ANJALI', 22, 2, 'Mumbai');

insert into student values;

(103, 'KIRAN', 19, 1, 'Pune');

insert into student values,

(104, 'monith', 23, 3, 'delhi');

insert into student values

(105, 'sara', 21, 1, 'hyderabad');

select * from students;

	student ID	NAME	AGE	deptID	city	Join date
1	101	Rahul	20	1	hyderabad	2025-8-26
2	102	ANJALI	22	2	Mumbai	2025-8-26
3	103	KIRAN	19	1	Pune	2025-8-26
4	104	monith	23	3	delhi	2025-08-26
5	105	sarakhali	21	1	hyderabad	2025-08-26

select * from department;

	deptID	Department	location
1	1	CSE	HYD
2	2	ECE	Mumbai
3	3	MEch	delhi

SELECT Name, AGE,
FROM student
where Age b/w 19 & 22,

	name	AGE
1	Rahul	20
2	Anjali	22
3	Kiran	19
4	Srikanth	21

select Name, dept ID,
from student
where dept ID IN (1,3)
order BY dept ID Desc,

name	dept ID
Rahul	3
Anjali	1
Kiran	1
Srikanth	1

update student |

set AGE = AGE + 1

where dept ID = 1 And AGE < 21;

s.no	stu-ID	name	age	dept-ID	city	joindate
1	101	Rahul	21	1	Hyd	25-8-26
2	102	Anjali	22	2	mumbai	25-8-26
3	103	Ikiran	20	1	Pune	25-8-26
4	104	Mohith	23	3	Delhi	28-8-26
5	105	Srikanth	21	1	Hyd	25-8-26

select distinct city
from student1;

s.no	CITY
1	Delhi
2	Hyd
3	mumbai
4	Pune

select dept ID, count(*) AS total-students
from student1
group by dept ID;

s.no	dept-ID	Total students
1	1	3
2	2	1
3	3	1

select dept ID, count(*) AS total-students
from student1
group BY dept ID
Having count(*) >= 2;

s.no	dept-ID	Total-Students
1	1	3

VELTECH	
EX No.	351
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	-
TOTAL (20)	15
SIGNATURE	W

25/8/25

Result: The implementation of the clauses
operators & functions in the query
DDL & DML commands.

TASK (3.2) - AGGREGATE Functions:

Aim: To study & implement aggregate functions (count(), sum(), Avg(), min(), max()) on a sample database.

AGGREGATE FUNCTIONS:

They're mostly used with grouped by the rows.

- count()
- sum()
- AVG()
- min()
- max()

create table student 2 (

roll no int primary key,
name varchar(50),
Age int,
dept id int,
marks int);

insert into student 2 values .

(1, "Arjun", 20, 101, 85);

(2, "Sheng", 21, 101, 90);

(3, "Ravi", 19, 102, 95);

(4, "Priya", 22, 102, 95);

(5, "Kiran", 20, 101, 60);

(6, "Ansh", 18, 102, 88);

select * from student 2;

	Roll-No	name	Age	dept ID	marks
1	1	Arjun	20	101	85
2	2	sneha	21	101	90
3	3	Ravi	19	102	70
4	4	Priya	22	102	95
5	5	Kiran	20	101	80
6	6	Anita	23	103	88

select dept ID, AVG (marks) AS AVG-marks
from student 2
grouped by dept ID;

	dept ID	TOP MARK
1	101	90
2	102	95
3	103	88

select dept ID min (marks) AS least,
mark from student 2
GROUP BY dept ID;

	dept ID	least mark
1	101	60
2	102	70
3	103	88

select dept ID, AVG (marks) AS avg-marks
from student2.

grouped by dept ID;
output:

sno	dept-ID	AVG-marks
1	101	78
2	102	82
3	103	88

(select dept ID, count(*) AS stu-count
from student2,

group by dept ID;

output:

sno	dept-ID	stu-count
1	101	3
2	102	2
3	103	1

VELTECH	
EX No.	32
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
REPORT (5)	4
TOTAL (20)	14
SIGNATURE	

Result:

implementation of all aggregate functions
has been performed successfully on
a table.

18/8/25

TASK - 3.1

using clauses, operators and functions in queries:

Aim: To implement of DML commands using clauses, operators and functions in queries.

clauses:

→ where order by, group by, having, distinct.

operators:

- equal (=)
- between
- AND
- OR
- IN

```
create table department (
    dept ID INT primary key,
    dept Name varchar(50) unique not null,
    location varchar(50) not null);
```

```
create table student (
```

```
    student ID int primary key,
```

```
    name - varchar(50) not null,
```

```
    Age int check (AGE >= 18),
```

```
    dept id int foreign key references
        department (dept ID)
```

```
    city varchar(50) default 'unknown'
```

```
    join date datetime default GETDATE()
```