

LAB 5-U24AI041

Question 1 : Use Employee table from Assignment 2.

- a) Display the list of employees whose name starts with 'A'.

Query:

```
use lab2;
select * from Employee where E_Name like "A%";
```

Output:

	EmpID	E_Name	Department	ManagerID	JoiningDate	Salary	City
▶	1	Amit Sharma	Engineering	5001	2020-03-15	75000	Palanpur
	124	Arjun Singh	IT Support	5007	2023-02-14	60000	Surat
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

- b) Add a new column named city and display the list of employees whose city starts with letter 'm'.

Query:

```
alter table Employee add column City varchar(26);
UPDATE Employee SET City = 'Palanpur' WHERE EmpId = 1;
UPDATE Employee SET City = 'Delhi' WHERE EmpId = 12;
UPDATE Employee SET City = 'Mumbai' WHERE EmpId = 100;
UPDATE Employee SET City = 'Kolkata' WHERE EmpId = 104;
UPDATE Employee SET City = 'Madhyapradesh' WHERE EmpId = 005;
UPDATE Employee SET City = 'Hyderabad' WHERE EmpId = 006;
UPDATE Employee SET City = 'Surat' WHERE EmpId = 124;
UPDATE Employee SET City = 'Jaipur' WHERE EmpId = 108;
UPDATE Employee SET City = 'Pune' WHERE EmpId = 029;
UPDATE Employee SET City = 'Bengaluru' WHERE EmpId = 101;
```

```
select * from Employee where City like "M%";
```

Output:

16	14:16:12	UPDATE Employee SET City = 'Palanpur' WHERE EmpId = 1	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.047 sec
17	14:16:12	UPDATE Employee SET City = 'Delhi' WHERE EmpId = 12	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.047 sec
18	14:16:12	UPDATE Employee SET City = 'Mumbai' WHERE EmpId = 100	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.047 sec
19	14:16:12	UPDATE Employee SET City = 'Kolkata' WHERE EmpId = 104	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.063 sec
20	14:16:12	UPDATE Employee SET City = 'Madhyapradesh' WHERE EmpId = 005	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.016 sec
21	14:16:12	UPDATE Employee SET City = 'Hyderabad' WHERE EmpId = 006	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.047 sec
22	14:16:13	UPDATE Employee SET City = 'Surat' WHERE EmpId = 124	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.047 sec
23	14:16:13	UPDATE Employee SET City = 'Jaipur' WHERE EmpId = 108	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.047 sec
24	14:16:13	UPDATE Employee SET City = 'Pune' WHERE EmpId = 029	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.156 sec
25	14:16:13	UPDATE Employee SET City = 'Bengaluru' WHERE EmpId = 101	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.047 sec

	EmpID	E_Name	Department	ManagerID	JoiningDate	Salary	City
▶	100	Ravi Kumar	Finance	5003	2021-01-10	72000	Mumbai
*	5	Karan Mehta	HR	5005	2022-06-01	80000	Madhyapradesh
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

c) Display the list of employees whose city ends with word ‘pradesh’.

Query:

```
select* from Employee where city like '%pradesh';
```

Output:

	EmpID	E_Name	Department	ManagerID	JoiningDate	Salary	City
▶	5	Karan Mehta	HR	5005	2022-06-01	80000	Madhyapradesh
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

d) Display the list of employees who are having exactly five characters in their name.

Query:

```
select* from Employee where E_name like '_____';
```

Output:

	EmpID	E_Name	Department	ManagerID	JoiningDate	Salary	City
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

e) Display the list of employees whose city is having only five characters.

Query:

```
select* from Employee where city like '_____';
```

Output:

	EmpID	E_Name	Department	ManagerID	JoiningDate	Salary	City
▶	12	Priya Desai	Marketing	5002	2019-07-22	68000	Delhi
*	124	Arjun Singh	IT Support	5007	2023-02-14	60000	Surat
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

f) Find the names of employees whose name includes the substring “man”.

Query:

```
select* from Employee where E_name like '%man%';
```

Output:

	EmpID	E_Name	Department	ManagerID	JoiningDate	Salary	City
▶	29	Manish Rao	HR	5009	2021-12-01	73000	Pune
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Question 2 :Use Student table from Assignment 2.

- a) Display the list of students whose name starts with 'M'.

Query:

```
select* from Student where s_name like 'N%';
```

Output:

	RollNo	s_Name	Semester	DOB	AdmissionDate	HostelRoom
*	NULL	NULL	NULL	NULL	NULL	NULL

- b) Add a new column named branch and display the list of employees whose branch starts with letter 'A'

Query:

```
alter table Student add column Branch varchar(26);
UPDATE Student SET Branch = 'Information Technology' WHERE RollNo = 121;
UPDATE Student SET Branch = 'Mechanical' WHERE RollNo = 170;
UPDATE Student SET Branch = 'Electrical' WHERE RollNo = 113;
UPDATE Student SET Branch = 'Computer Science' WHERE RollNo = 104;
UPDATE Student SET Branch = 'Civil' WHERE RollNo = 205;
UPDATE Student SET Branch = 'Electronics' WHERE RollNo = 606;
UPDATE Student SET Branch = 'Artificial Intelligence' WHERE RollNo = 07;
UPDATE Student SET Branch = 'Chemical' WHERE RollNo = 870;
UPDATE Student SET Branch = 'Biomedical' WHERE RollNo = 199;
UPDATE Student SET Branch = 'Aerospace' WHERE RollNo = 100;
select * from Student where Branch like "A%";
```

Output:

21 11:48:31	altered table Student add branch varchar(30)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
22 11:48:47	UPDATE Student SET branch = 'AI' WHERE RollNo = 101	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
23 11:48:47	UPDATE Student SET branch = 'Electrical' WHERE RollNo = 102	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
24 11:48:47	UPDATE Student SET branch = 'Mechanical' WHERE RollNo = 203	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
25 11:48:47	UPDATE Student SET branch = 'CS' WHERE RollNo = 208	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
26 11:48:47	UPDATE Student SET branch = 'Mechanical' WHERE RollNo = 305	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
27 11:48:47	UPDATE Student SET branch = 'Civil' WHERE RollNo = 106	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
28 11:48:47	UPDATE Student SET branch = 'Chemical' WHERE RollNo = 07	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
29 11:48:47	UPDATE Student SET branch = 'MNC' WHERE RollNo = 215	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
30 11:48:47	UPDATE Student SET branch = 'IC' WHERE RollNo = 109	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
31 11:48:47	UPDATE Student SET branch = 'AI' WHERE RollNo = 310	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0

	RollNo	s_Name	Semester	DOB	AdmissionDate	HostelRoom	Branch
▶	100	Sedha	1	2024-07-04	2025-08-09	360	Aerospace
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

c) Display the list of students who are having exactly five characters in their name.

Query:

```
select* from Student where s_name like '_____';
```

Output:

	RollNo	s_Name	Semester	DOB	AdmissionDate	HostelRoom	Branch
▶	7	Umang	8	2013-12-05	2017-05-14	305	Artificial Intelligence
	100	Sedha	1	2024-07-04	2025-08-09	360	Aerospace
	113	Vivek	3	2013-08-14	2014-08-14	189	Electrical
	199	Harsh	3	2021-09-24	2025-08-14	248	Biomedical
	870	Kavya	4	2010-07-04	2019-07-19	981	Chemical
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

d) Add a new column named city and display the list of students whose city is having only ten characters.

Query:

```
alter table Student add city varchar(30);
UPDATE Student SET city = 'Palanpur' WHERE RollNo = 101;
UPDATE Student SET city = 'Unjha' WHERE RollNo = 102;
UPDATE Student SET city = 'Surat' WHERE RollNo = 203;
UPDATE Student SET city = 'Ahmedabad' WHERE RollNo = 208;
UPDATE Student SET city = 'Mehsana' WHERE RollNo = 305;
UPDATE Student SET city = 'Gandhinagar' WHERE RollNo = 106;
UPDATE Student SET city = 'Uttarpradesh' WHERE RollNo = 07;
UPDATE Student SET city = 'Navsari' WHERE RollNo = 215;
UPDATE Student SET city = 'Bharuch' WHERE RollNo = 109;
UPDATE Student SET city = 'Baroda' WHERE RollNo = 310;
select* from Student where city like '_____';
```

Output:

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	RollNo	s_Name	Semester	DOB	AdmissionDate	HostelRoom	Branch	City
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Student 13 x

Output:

Action Output

#	Time	Action	Message	Duration / Fetch
56	14:40:38	UPDATE Student SET City = 'Kolkata' WHERE RollNo = 104	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.031 sec
57	14:40:38	UPDATE Student SET City = 'Madhyapradesh' WHERE RollNo = 205	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.016 sec
58	14:40:38	UPDATE Student SET City = 'Hyderabad' WHERE RollNo = 606	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.016 sec
59	14:40:38	UPDATE Student SET City = 'Surat' WHERE RollNo = 07	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.031 sec
60	14:40:38	UPDATE Student SET City = 'Jaipur' WHERE RollNo = 870	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.016 sec
61	14:40:38	UPDATE Student SET City = 'Pune' WHERE RollNo = 199	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.078 sec
62	14:40:38	UPDATE Student SET City = 'Bengaluru' WHERE RollNo = 100	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.063 sec
63	14:40:38	select * from Student where City like "_____ " LIMIT 0, 1000	0 row(s) returned	0.016 sec / 0.000 sec

e) Find the names of students whose name includes the substring "sh".

Query:

```
select* from Student where s_name like '%sh%';
```

Output:

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell

	RollNo	s_Name	Semester	DOB	AdmissionDate	HostelRoom	Branch	City
▶	199	Harsh	3	2021-09-24	2025-08-14	248	Biomedical	Pune
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Question 3 : Create table Customers with this schema: (CustomerID, CustomerName,

ContactName, Address, City, PostalCode, Country)

Query:

```
use lab5;

create table Customers(
    CustomerID varchar(50) primary key,
    CustomerName varchar(65),
    ContactNo int(10),
    Address text (100),
    City varchar(19),
    PostalCode int(6),
```

```
Country varchar (10)  
);  
INSERT INTO Customers  
(CustomerID, CustomerName, ContactNo, Address, City, PostalCode, Country)  
VALUES  
(1, 'Amit Sharma', 1545145178,'12 Industrial Area', 'Delhi', '110001', 'India'),  
(2, 'Priya Mehta', 1545145151,'45 Garden Street', 'Mumbai', '400002', 'India'),  
(3, 'Rimsat Verma', 1545121451,'88 Tower Road', 'Bengaluru', '560001', 'India'),  
(4, 'Neha Patel', 1577145178,'23 Marine Drive', 'Surat', '395003', 'India'),  
(5, 'Karan Singh', 9997145178,'101 Market Lane', 'Kolkata', '700001', 'India'),  
(6, 'Umangbhai patel', 1500005178,'101 Market Lane', 'Madhya Pradesh', '700801', 'India')  
;
```

47 11:52:54 Create table Customers(CustomerID int(6) Primary Key, CustomerName varchar(30), ContactNo bigint(10), Ad... 0 row(s) affected

48 11:52:54 INSERT INTO Customers VALUES (101001, 'Rajesh Shama', 9876543210, '12, MG Road', 'Mumbai', 400001,... 10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0

a) Return all customers that ends with the pattern 'bhai'.

Query:

```
select* from Customers where CustomerName like '%bhai';
```

Output:

b) Return all customers that contains the pattern 'sat'.

Query:

```
select* from Customers where CustomerName like '%sat%';
```

Output:

c) Return all customers with a city starting with any character, followed by "pradesh".

Query:

```
select* from Customers where City like '%pradesh';
```

Output:

d) Return all customers with a city starting with "S", followed by any four characters, ending with "at".

Query:

```
select* from Customers where City like 'S__at';
```

Output:

e) Return all customers from Mumbai.

Query:

```
select* from Customers where City='Mumbai';
```

Output:

Result Grid				Filter Rows:		Edit:		Export/Import:		Wrap	
	CustomerID	CustomerName	ContactNo	Address		City	PostalCode	Country			
▶	2	Priya Mehta	1545145151	45 Garden Street	NULL	Mumbai	400002	India			
◀	NULL	HULL	NULL	NULL	NULL	NULL	NULL	NULL			