ASINGMENT NO - 2 FILTERING

Note : Create the following dummy table in MySQL Workbench using CREATE FUNCTION-

QUESTION 1	: Show employees working in either the 'IT' or 'HR' departments.

ANSWER

QUESTION 2	Retrieve employees whose department is in 'Sales', 'IT', or 'Finance'.

ANSWER


```
62
63      ## QUESTION NO 1
64    • select * from employees
65      where department in ('IT','HR');
66    • select * from employees;
67
68      ## QUESTION NO 2
69    • SELECT *FROM employees
70      WHERE department IN ('Sales', 'IT', 'Finance');
71
72
73
```

Result Grid

Emp_id	Emp_Name	Department	City	Salary	Hire_Date
101	Rahul Mehra	Sales	Delhi	55000	2020-04-12
103	Aman Singh	IT	bengaluru	72000	2021-03-10
104	Neha Patel	Sales	Delhi	48000	2022-01-14
106	Divya Nair	IT	Chennai	81000	2019-12-11
108	Simran Kaur	Finance	Mumbai	58000	2021-08-03
109	Arjun Reddy	IT	Hyderabad	70000	2022-02-18
110	Anjali Das	Sales	Kolkata	51000	2023-01-15

Output — Action Output

#	Time	Action	Message	Duration / Fetch
22	23:30:44	insert into employees values (110,'Anjali Das','Sales','Kolkata','51000','2023-01-15')	1 row(s) affected	0.016 sec
23	23:30:56	select * from employees	10 row(s) returned	0.000 sec / 0.000 sec
24	23:54:01	select * from employees where department in ('IT','HR')	5 row(s) returned	0.000 sec / 0.000 sec
25	23:59:02	select * from employees	10 row(s) returned	0.000 sec / 0.000 sec
26	00:00:25	SELECT *FROM employees WHERE department IN ('Sales', 'IT', 'Finance')	7 row(s) returned	0.000 sec / 0.000 sec

QUESTION 3		Display employees whose salary is between ₹50,000 and ₹70,000
ANSWER		

MySQL Workbench

Local instance MySQL80

File   Edit   View   Query   Database   Server   Tools   Scripting   Help

Navigator

SCHEMAS

Filter objects

▼ company_db
  ▶ Tables
    Views
    Stored Procedures
    Functions
  ▶ company_md
  ▶ employee
  ▶ mitesh
  ▶ orders
  ▶ pw_skills
  ▶ pwskills
  ▶ sakila
  ▶ sys
  ▶ world

Assingment no 2 SQL*

Don't Limit

```
67
68     ## QUESTION NO 2
69  •  SELECT *FROM employees
70     WHERE department IN ('Sales', 'IT', 'Finance');
71  •  SELECT *FROM employees;
72
73     ## QUESTION NO 3
74  •  SELECT *FROM employees
75     WHERE salary BETWEEN 50000 AND 70000;
76
77
78
```

Result Grid   Filter Rows: Export: Wrap Cell Content:

Emp_id	Emp_Name	Department	City	Salary	Hire_Date
101	Rahul Mehra	Sales	Delhi	55000	2020-04-12
102	Priya Sharma	HR	Mumbai	62000	2019-09-25
107	Raj Kumar	HR	Delhi	60000	2020-05-28
108	Simran Kaur	Finance	Mumbai	58000	2021-08-03
109	Arjun Reddy	IT	Hyderabad	70000	2022-02-18
110	Anjali Das	Sales	Kolkata	51000	2023-01-15

Administration   Schemas

Information

Schema: company_db

employees 20

Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
28	00:12:20	Select * from employees where salary between 500000 and 70000	0 row(s) returned	0.016 sec / 0.000 sec
29	00:12:32	SELECT *FROM employees	10 row(s) returned	0.000 sec / 0.000 sec
30	00:12:59	Select * from employees where salary between 500000 and 70000	0 row(s) returned	0.000 sec / 0.000 sec
31	00:13:30	Select * from employees where salary between '500000' and '70000'	0 row(s) returned	0.000 sec / 0.000 sec
32	00:14:31	SELECT *FROM employees WHERE salary BETWEEN 50000 AND 70000	6 row(s) returned	0.000 sec / 0.000 sec

Object Info   Session

QUESTION 4		List employees whose names start with the letter 'A'.
ANSWER		

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- company_db
  - Tables
  - Views
  - Stored Procedures
  - Functions
- company_md
- employee
- mitesh
- orders
- pw_skills
- pwskills
- sakila
- sys
- world

Assignment no 2 SQL*

Don't Limit

```
75      WHERE salary BETWEEN 50000 AND 70000;
76  •   SELECT *FROM employees;
77
78      ## QUESTION NO 4
79  •   SELECT * FROM employees
80      WHERE Emp_Name LIKE 'A%';
81
82
83
84
85
86
87
```

Result Grid   Filter Rows: Export: Wrap Cell Content:

Emp_id	Emp_Name	Department	City	Salary	Hire_Date
103	Aman Singh	IT	bengaluru	72000	2021-03-10
109	Arjun Reddy	IT	Hyderabad	70000	2022-02-18
110	Anjali Das	Sales	Kolkata	51000	2023-01-15

Administration Schemas

Information

Schema: company_db

Object Info   Session

employees 3

Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
❌ 3	13:46:02	SELECT * FROM employees WHERE name LIKE 'A%'	Error Code: 1054. Unknown column 'name' in 'where clause'	0.000 sec
✅ 4	13:46:13	SELECT *FROM employees	10 row(s) returned	0.000 sec / 0.000 sec
✅ 5	13:46:49	SELECT * FROM employees WHERE Emp_Name LIKE 'A%'	3 row(s) returned	0.000 sec / 0.000 sec

QUESTION 5		: Find employees whose names contain the substring 'an
ANSWER		

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

Assingment no 2 SQL*

SCHEMAS

Filter objects

- company_db
  - Tables
  - Views
  - Stored Procedures
  - Functions
- company_md
- employee
- mitesh
- orders
- pw_skills
- pwskills
- sakila
- sys
- world

```
73    ## QUESTION NO 3
74  ● SELECT *FROM employees
75    WHERE salary BETWEEN 50000 AND 70000;
76  ● SELECT *FROM employees;
77
78    ## QUESTION NO 4
79  ● SELECT * FROM employees
80  ● WHERE Emp_Name LIKE 'A%';
81  ● SELECT *FROM employees;
82
83    ## QUESTION NO 5
84  ● SELECT * FROM employees
85    WHERE Emp_Name LIKE 'An%';
```

Result Grid   Filter Rows: Export: Wrap Cell Content:

Emp_id	Emp_Name	Department	City	Salary	Hire_Date
110	Anjali Das	Sales	Kolkata	51000	2023-01-15

Administration   Schemas

Information

Schema: company_db

employees 7

Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
7	13:51:07	SELECT * FROM employees WHERE Emp_Name LIKE 'An%'	1 row(s) returned	0.000 sec / 0.000 sec
8	13:51:19	SELECT *FROM employees	10 row(s) returned	0.000 sec / 0.000 sec
9	13:51:26	SELECT * FROM employees WHERE Emp_Name LIKE 'An%'	1 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

QUESTION 6		Show employees who are from 'Delhi' or 'Mumbai' and earn more than ₹55,000.
ANSWER		


```
83    ## QUESTION NO 5
84  ● SELECT * FROM employees
85    WHERE Emp_Name LIKE 'An%';
86  ● SELECT *FROM employees;
87
88    ## QUESTION NO 6
89  ● SELECT * FROM employees
90    WHERE city IN ('Delhi', 'Mumbai')
91      AND salary > 55000;
92
93
94
95
```

Emp_id	Emp_Name	Department	City	Salary	Hire_Date
102	Priya Sharma	HR	Mumbai	62000	2019-09-25
107	Raj Kumar	HR	Delhi	60000	2020-05-28
108	Simran Kaur	Finance	Mumbai	58000	2021-08-03

#	Time	Action	Message	Duration / Fetch
✓ 9	13:51:26	SELECT * FROM employees WHERE Emp_Name LIKE 'An%'	1 row(s) returned	0.000 sec / 0.000 sec
✓ 10	13:52:48	SELECT *FROM employees	10 row(s) returned	0.000 sec / 0.000 sec
✓ 11	14:17:22	SELECT * FROM employees WHERE city IN ('Delhi', 'Mumbai') AND salary > 55000	3 row(s) returned	0.000 sec / 0.000 sec

QUESTION 7	Display all employees except those from the 'HR' department.
ANSWER	


```
91        AND salary > 55000;
92  ●  SELECT *FROM employees;
93
94       ## QUESTION NO 7
95  ●  select * from employees
96       WHERE department IN ('HR');
97  ●  SELECT *FROM employees;
98
99
100
101
102
103
```

Result Grid

Emp_id	Emp_Name	Department	City	Salary	Hire_Date
102	Priya Sharma	HR	Mumbai	62000	2019-09-25
107	Raj Kumar	HR	Delhi	60000	2020-05-28

Output

Action Output

#	Time	Action	Message	Duration / Fetch
13	14:21:09	select *from employees WHERE department IN ('HR')	2 row(s) returned	0.000 sec / 0.000 sec
14	14:21:19	SELECT *FROM employees	10 row(s) returned	0.000 sec / 0.000 sec
15	14:21:28	select *from employees WHERE department IN ('HR')	2 row(s) returned	0.000 sec / 0.000 sec

QUESTION 8		Get all employees hired between 2019 and 2022, ordered by HireDate (oldest first).

ANSWER


```sql
95    select * from employees
96    WHERE department IN ('HR');
97    SELECT *FROM employees;
98
99    ## QUESTION NO 8
100   ## Get all employees hired between 2019 and 2022, ordered by HireDate (oldest first).
101   SELECT * FROM employees
102   WHERE Hire_Date BETWEEN '2019-01-01' AND '2022-12-31'
103   ORDER BY hire_date ASC;
104
105
106
107
```

Result Grid

Emp_id	Emp_Name	Department	City	Salary	Hire_Date
102	Priya Sharma	HR	Mumbai	62000	2019-09-25
106	Divya Nair	IT	Chennai	81000	2019-12-11
101	Rahul Mehra	Sales	Delhi	55000	2020-04-12
107	Raj Kumar	HR	Delhi	60000	2020-05-28
103	Aman Singh	IT	bengaluru	72000	2021-03-10
108	Simran Kaur	Finance	Mumbai	58000	2021-08-03
104	Neha Patel	Sales	Delhi	48000	2022-01-14
109	Arjun Reddy	IT	Hyderabad	70000	2022-02-18

Table: employees

Columns:
Emp_id	int
Emp_Name	varchar(20)
Department	char(10)
City	char(15)
Salary	int
Hire_Date	date

Output — Action Output

#	Time	Action	Message	Duration / Fetch
20	14:41:31	SELECT * FROM employees WHERE HireDate BETWEEN '2019-01-01' AND '2022-12-31' ORDER BY Hir...	Error Code: 1054. Unknown column 'HireDate' in 'where clause'	0.000 sec
21	14:43:58	SELECT * FROM employees WHERE Hire_Date BETWEEN '2019-01-01' AND '2022-12-31' ORDER BY Hi...	Error Code: 1054. Unknown column 'HireDate' in 'order clause'	0.000 sec
22	14:45:02	SELECT * FROM employees WHERE Hire_Date BETWEEN '2019-01-01' AND '2022-12-31' ORDER BY hi...	8 row(s) returned	0.000 sec / 0.000 sec