SQL PRACTICE 3

```
CREATE TABLE students10 (
    student_id INT,
    name VARCHAR(50),
    course VARCHAR(50),
    marks INT,
    age INT,
    city VARCHAR(50),
    scholarship INT
);
INSERT INTO students10 VALUES
(1, 'Ravi', 'Math', 85, 20, 'Chennai', NULL),
(2, 'Priya', 'Science', 92, 21, 'Delhi', 10000),
(3, 'Amit', 'English', 75, 19, 'Mumbai', 5000),
(4, 'Sneha', 'Math', 88, 22, 'Kolkata', NULL),
(5, 'John', 'History', 67, 20, 'Chennai', NULL),
(6, 'Meena', 'Science', 95, 23, 'Delhi', 15000),
(7, 'Karan', 'English', 70, 20, 'Bangalore', 3000),
(8, 'Divya', 'History', 80, 22, 'Mumbai', NULL);
```

1.Display students with marks between 70 and 90.

QUERY WITH OUTPUT:

```
22 •  SELECT *
23    FROM students10
24    WHERE marks BETWEEN 70 AND 90;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship
1	Ravi	Math	85	20	Chennai	NULL
3	Amit	English	75	19	Mumbai	5000
4	Sneha	Math	88	22	Kolkata	NULL
7	Karan	English	70	20	Bangalore	3000
8	Divya	History	80	22	Mumbai	NULL

2.List students aged between 20 and 22.

QUERY WITH OUTPUT:

```
25 •  SELECT *
26    FROM students10
27    WHERE age BETWEEN 20 AND 22;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship
1	Ravi	Math	85	20	Chennai	NULL
2	Priya	Science	92	21	Delhi	10000
4	Sneha	Math	88	22	Kolkata	NULL
5	John	History	67	20	Chennai	NULL
7	Karan	English	70	20	Bangalore	3000
8	Divya	History	80	22	Mumbai	NULL

3.Find students whose name starts with 'P'

QUERY WITH OUTPUT:

```
28 •  SELECT *
29    FROM students10
30    WHERE name LIKE 'P%';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship
2	Priya	Science	92	21	Delhi	10000

4.Find students whose city contains 'ai'.

QUERY WITH OUTPUT:

```
31 •  SELECT *
32    FROM students10
33    WHERE city LIKE '%ai%';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship
1	Ravi	Math	85	20	Chennai	NULL
3	Amit	English	75	19	Mumbai	5000
5	John	History	67	20	Chennai	NULL
8	Divya	History	80	22	Mumbai	NULL

5.Find names where the second character is 'r'.

QUERY WITH OUTPUT:

```
34 •  SELECT *
35    FROM students10
36    WHERE name LIKE '_r%';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship
2	Priya	Science	92	21	Delhi	10000

6.Show top 3 students with highest marks.

QUERY WITH OUTPUT:

```
37 •  SELECT *
38    FROM students10
39    ORDER BY marks DESC
40    LIMIT 3;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

student_id	name	course	marks	age	city	scholarship
6	Meena	Science	95	23	Delhi	15000
2	Priya	Science	92	21	Delhi	10000
4	Sneha	Math	88	22	Kolkata	NULL

7.Show students who have a scholarship.

QUERY WITH OUTPUT:

```
41 •  SELECT *
42    FROM students10
43    WHERE scholarship IS NOT NULL;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship
2	Priya	Science	92	21	Delhi	10000
3	Amit	English	75	19	Mumbai	5000
6	Meena	Science	95	23	Delhi	15000
7	Karan	English	70	20	Bangalore	3000

8.Show students only if there is at least one student from 'Delhi'.

QUERY WITH OUTPUT:

```
44 •  SELECT *
45    FROM students10
46    WHERE EXISTS (
47        SELECT 1
48        FROM students10
49        WHERE city = 'Delhi'
50    );
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship
1	Ravi	Math	85	20	Chennai	NULL
2	Priya	Science	92	21	Delhi	10000
3	Amit	English	75	19	Mumbai	5000
4	Sneha	Math	88	22	Kolkata	NULL
5	John	History	67	20	Chennai	NULL
6	Meena	Science	95	23	Delhi	15000
7	Karan	English	70	20	Bangalore	3000
8	Divya	History	80	22	Mumbai	NULL

9.Show students with marks greater than ANY student in the 'History' course.

QUERY WITH OUTPUT:

```
51 •  SELECT *
52    FROM students10
53    WHERE marks > ANY (
54        SELECT marks
55        FROM students10
56        WHERE course = 'History'
57    );
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship
1	Ravi	Math	85	20	Chennai	NULL
2	Priya	Science	92	21	Delhi	10000
3	Amit	English	75	19	Mumbai	5000
4	Sneha	Math	88	22	Kolkata	NULL
6	Meena	Science	95	23	Delhi	15000
7	Karan	English	70	20	Bangalore	3000
8	Divya	History	80	22	Mumbai	NULL

10.Show students with marks greater than ALL students in the 'English' course.

QUERY WITH OUTPUT:

```
58 •  SELECT *
59    FROM students10
60    WHERE marks > ALL (
61        SELECT marks
62        FROM students10
63        WHERE course = 'English'
64    );
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship
1	Ravi	Math	85	20	Chennai	NULL
2	Priya	Science	92	21	Delhi	10000
4	Sneha	Math	88	22	Kolkata	NULL
6	Meena	Science	95	23	Delhi	15000
8	Divya	History	80	22	Mumbai	NULL

11.Show students in 'Math' course AND age > 21.

QUERY WITH OUTPUT:

```
65 •  SELECT *
66    FROM students10
67    WHERE course = 'Math' AND age > 21;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship
4	Sneha	Math	88	22	Kolkata	NULL

12.Show students in 'Science' OR 'English' course.

QUERY WITH OUTPUT:

```
65 •  SELECT *
66    FROM students10
67    WHERE course = 'Math' AND age > 21;
68 •  SELECT *
69    FROM students10
70    WHERE course = 'Science' OR course = 'English';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship
2	Priya	Science	92	21	Delhi	10000
3	Amit	English	75	19	Mumbai	5000
6	Meena	Science	95	23	Delhi	15000
7	Karan	English	70	20	Bangalore	3000

13.Show students NOT from 'Mumbai'

QUERY WITH OUTPUT:

```
71 •  SELECT *
72    FROM students10
73    WHERE city <> 'Mumbai';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship
1	Ravi	Math	85	20	Chennai	NULL
2	Priya	Science	92	21	Delhi	10000
4	Sneha	Math	88	22	Kolkata	NULL
5	John	History	67	20	Chennai	NULL
6	Meena	Science	95	23	Delhi	15000
7	Karan	English	70	20	Bangalore	3000

14.Show students who don't have a scholarship.

QUERY WITH OUTPUT:

```
74 •  SELECT *
75    FROM students10
76    WHERE scholarship = 'No';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	name	course	marks	age	city	scholarship

15.Replace NULL scholarship with 0 using IFNULL.

QUERY WITH OUTPUT:

```
77 •  SELECT name, age, course, marks, city, IFNULL(scholarship, 0) AS scholarship
78    FROM students10;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	age	course	marks	city	scholarship
Ravi	20	Math	85	Chennai	0
Priya	21	Science	92	Delhi	10000
Amit	19	English	75	Mumbai	5000
Sneha	22	Math	88	Kolkata	0
John	20	History	67	Chennai	0
Meena	23	Science	95	Delhi	15000
Karan	20	English	70	Bangalore	3000
Divya	22	History	80	Mumbai	0

16.Replace NULL scholarship with 0 using COALESCE.

QUERY WITH OUTPUT:

```
79 •  SELECT name, age, course, marks, city, COALESCE(scholarship, 0) AS scholarship
80    FROM students10;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	age	course	marks	city	scholarship
Ravi	20	Math	85	Chennai	0
Priya	21	Science	92	Delhi	10000
Amit	19	English	75	Mumbai	5000
Sneha	22	Math	88	Kolkata	0
John	20	History	67	Chennai	0
Meena	23	Science	95	Delhi	15000
Karan	20	English	70	Bangalore	3000
Divya	22	History	80	Mumbai	0