

# **DEPARTMENT OF MECHATRONICS**

# SQL

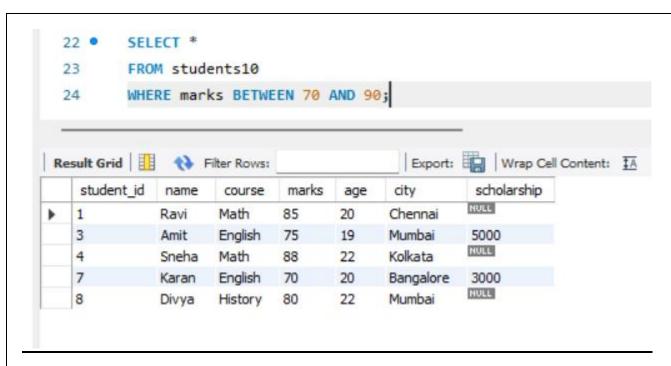
# **ASSIGNMENT -3**

NAME OF THE STUDENT	Mohamed Riyas M
REGISTER NUMBER	22UMT017
YEAR/SEMESTER	IV/VII
ASSIGNMENT NUMBER	3

# **SQLASSIGNMENT 3**

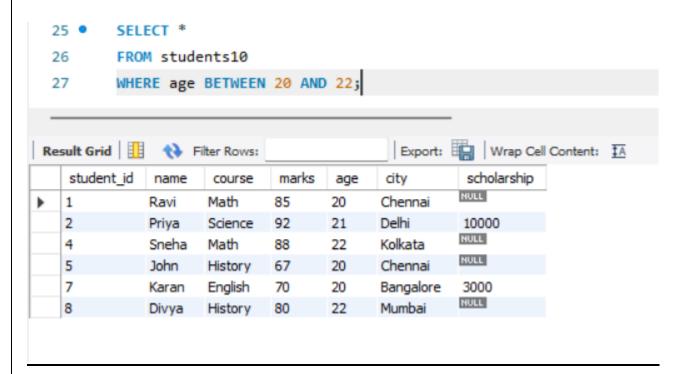
```
CREATE TABLE students10 (
  student_id INT,
  name VARCHAR(50),
  course VARCHAR(50),
  marks INT,
  age INT,
  city VARCHAR(50),
  scholarship INT
);
INSERT INTO students10 VALUES
(1, 'Ravi', 'Math', 85, 20, 'Chennai', NULL),
(2, 'Priya', 'Science', 92, 21, 'Delhi', 10000),
(3, 'Amit', 'English', 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.

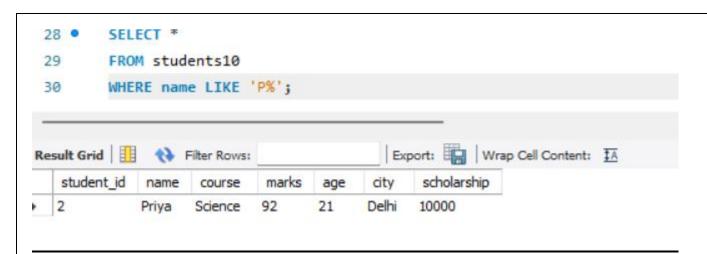


2.List students aged between 20 and 22.

#### **QUERY WITH OUTPUT:**

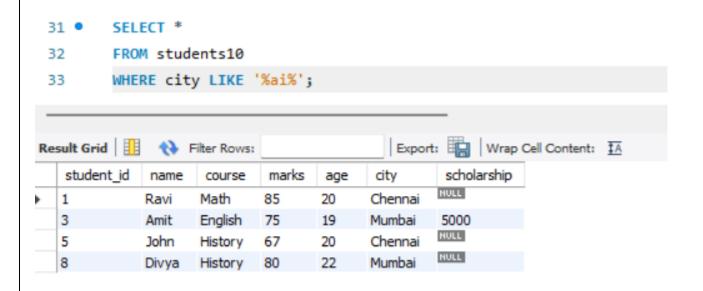


3. Find students whose name starts with 'P'

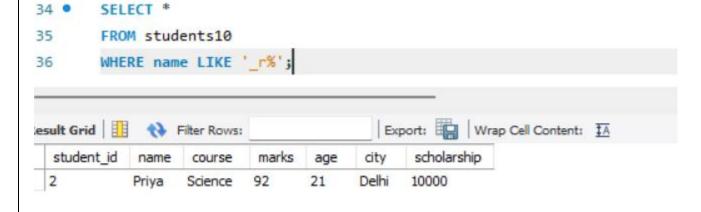


4. Find students whose city contains 'ai'.

# **QUERY WITH OUTPUT:**

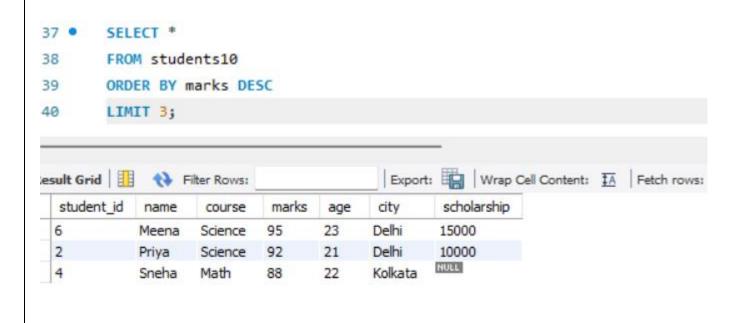


5. Find names where the second character is 'r'.



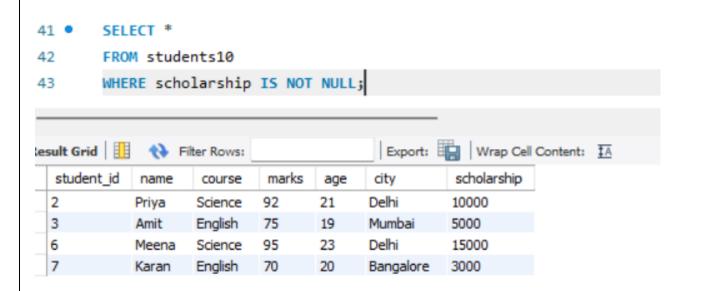
6. Show top 3 students with highest marks.

#### **QUERY WITH OUTPUT:**

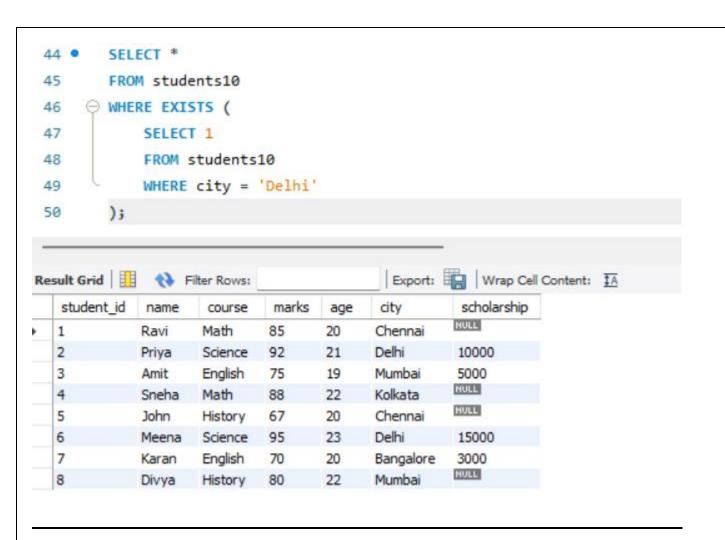


7. Show students who have a scholarship.

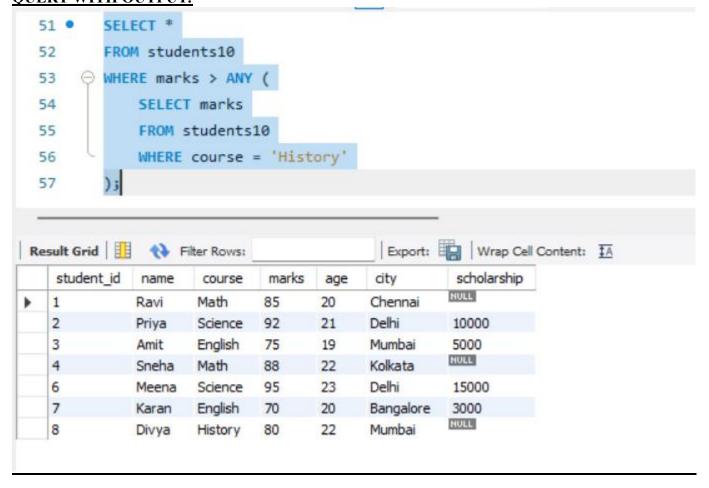
# **QUERY WITH OUTPUT:**



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



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



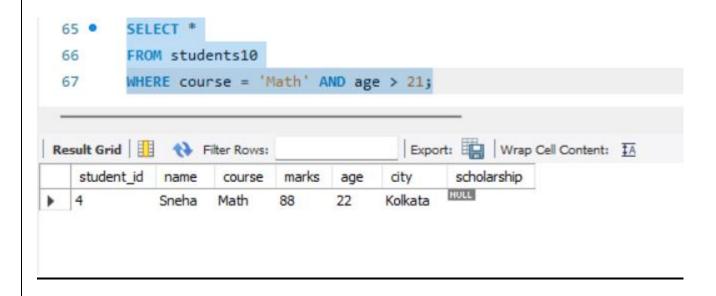
10. Show students with marks greater than ALL students in the 'English' course.

# **QUERY WITH OUTPUT:**

```
SELECT *
 58 •
 59
         FROM students10

    ○ WHERE marks > ALL (
 60
              SELECT marks
 61
 62
              FROM students10
 63
             WHERE course = 'English'
 64
         );
Export: Wrap Cell Content: IA
   student_id
                                                      scholarship
              name
                      course
                              marks
                                      age
                                            city
                                                    NULL
                     Math
                                            Chennai
             Ravi
                              85
                                     20
  1
  2
                                     21
                                            Delhi
             Priya
                     Science
                              92
                                                     10000
                                                    NULL
  4
                     Math
                                            Kolkata
             Sneha
                              88
                                     22
  6
             Meena
                     Science
                              95
                                     23
                                            Delhi
                                                     15000
                                                    NULL
  8
                              80
                                     22
                                            Mumbai
             Divya
                     History
```

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

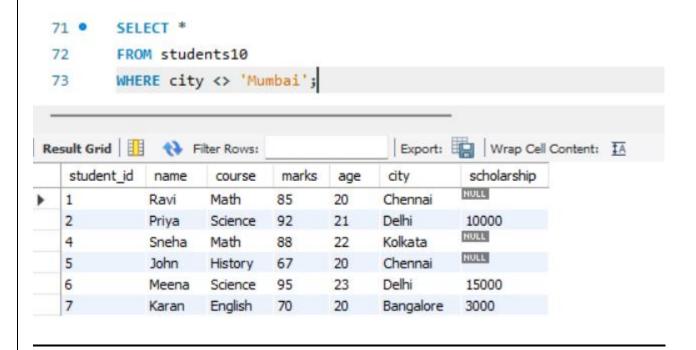


12. Show students in 'Science' OR 'English' course.

### **QUERY WITH OUTPUT:**

```
SELECT *
 65 •
 66
         FROM students10
         WHERE course = 'Math' AND age > 21;
 67
         SELECT *
 68 •
         FROM students10
 69
 70
          WHERE course = 'Science' OR course = 'English';
Result Grid
              Filter Rows:
                                               Export: Wrap Cell Content: IA
   student id
                               marks
                                                         scholarship
              name
                      course
                                       age
                                              city
                                             Delhi
   2
              Priva
                      Science
                               92
                                       21
                                                        10000
   3
                                       19
                                             Mumbai
                                                        5000
              Amit
                      English
                               75
   6
                               95
                                       23
                                             Delhi
                                                        15000
              Meena
                      Science
   7
                      English
                               70
                                       20
                                             Bangalore
                                                        3000
              Karan
```

13. Show students NOT from 'Mumbai'

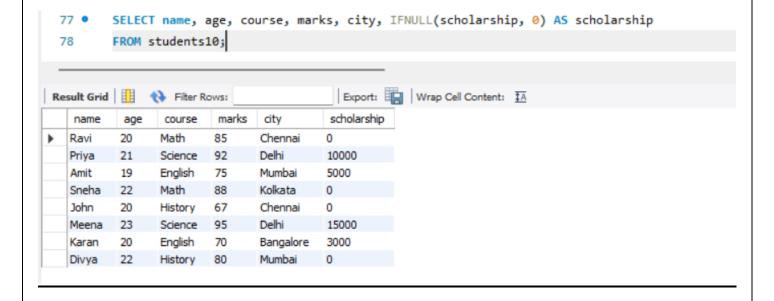


14. Show students who don't have a scholarship.

## **QUERY WITH OUTPUT:**



15.Replace NULL scholarship with 0 using IFNULL.



16.Replace NULL scholarship with 0 using COALESCE.

