**SQL ASSIGNMENT-3**

**QUESTIONS:**

**PART-1:**

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.

3.Find students whose name starts with 'P'.

4.Find students whose city contains 'ai'.

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

6.Show top 3 students with highest marks.

7.Show students who have a scholarship.

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.

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

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

13.Show students NOT from 'Mumbai'.

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

15.Replace NULL scholarship with 0 using IFNULL.

16.Replace NULL scholarship with 0 using COALESCE.

**ANSWER:**

**PART-1:**

use industry;

CREATE TABLE Products (

product\_id INT PRIMARY KEY,

product\_name VARCHAR(100),

category VARCHAR(50),

unit\_price DECIMAL(10, 2)

);

INSERT INTO Products (product\_id, product\_name, category, unit\_price) VALUES

(101, 'Laptop', 'Electronics', 500.00),

(102, 'Smartphone', 'Electronics', 300.00),

(103, 'Headphones', 'Electronics', 30.00),

(104, 'Keyboard', 'Electronics', 20.00),

(105, 'Mouse', 'Electronics', 15.00);

select\* from Products;

select product\_name,unit\_price from Products;

select \* from Products where category ="Electronics";

select product\_id,product\_name from Products where unit\_price >100;

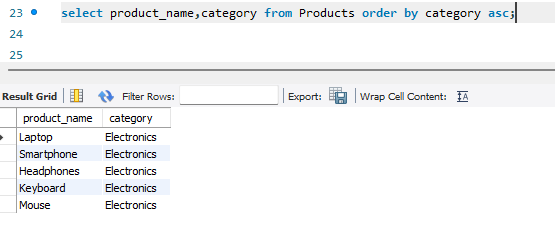
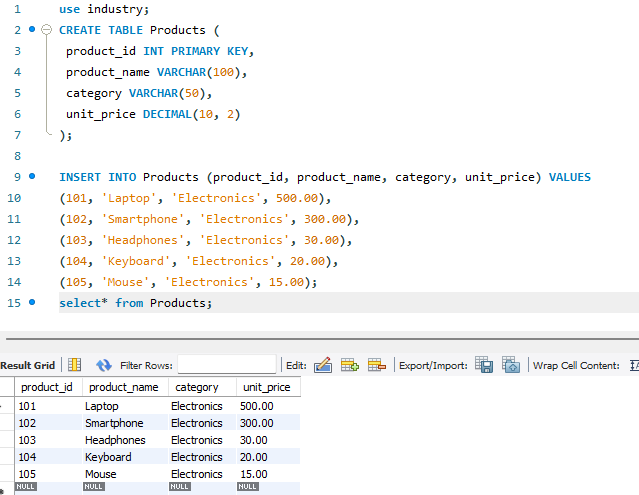
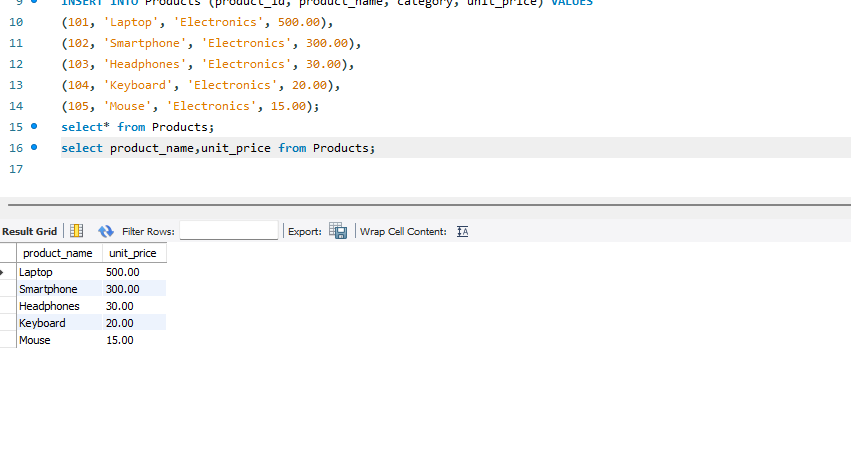
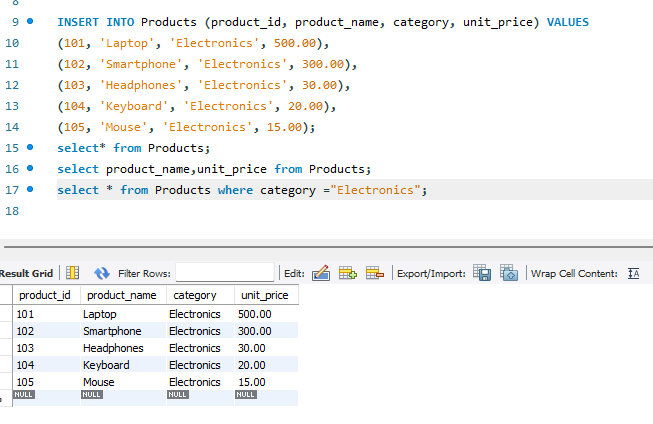
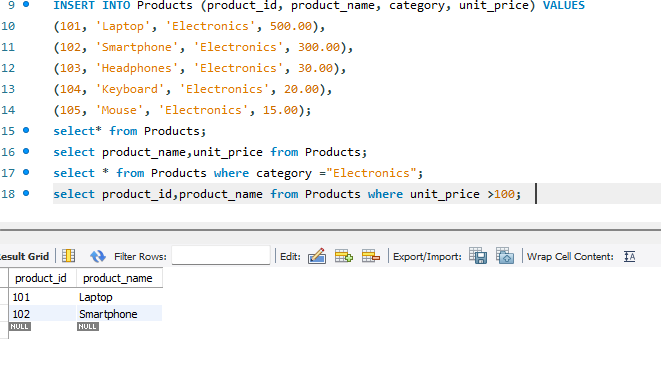
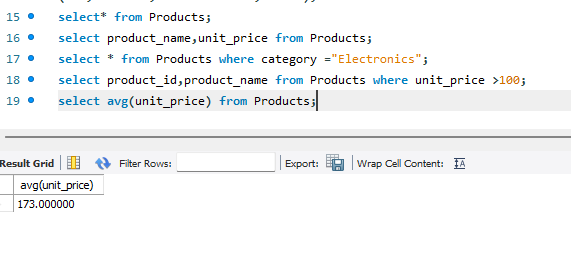
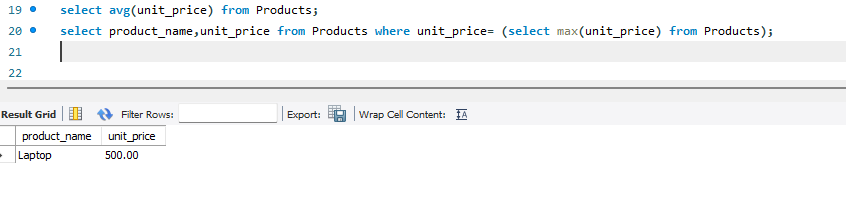
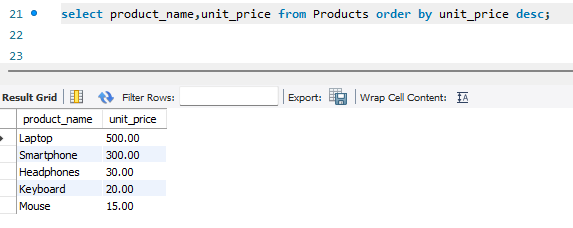
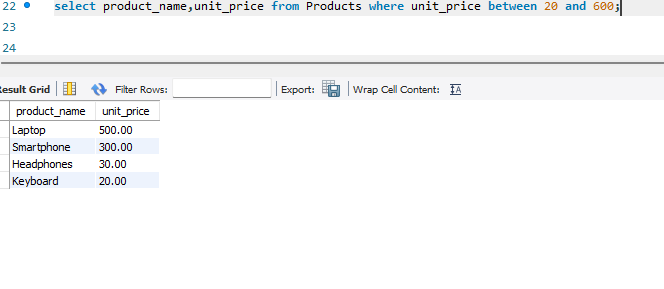
select avg(unit\_price) from Products;

select product\_name,unit\_price from Products where unit\_price= (select max(unit\_price) from Products);

select product\_name,unit\_price from Products order by unit\_price desc;

select product\_name,unit\_price from Products where unit\_price between 20 and 600;

select product\_name,category from Products order by category asc;



**PART-2:**

CREATE TABLE Sales (

sale\_id INT PRIMARY KEY,

product\_id INT,

quantity\_sold INT,

sale\_date DATE,

total\_price DECIMAL(10, 2),FOREIGN KEY (product\_id) REFERENCES Products(product\_id)

);

-- Insert sample data into Sales table

INSERT INTO Sales (sale\_id, product\_id, quantity\_sold, sale\_date, total\_price) VALUES

(1, 101, 5, '2024-01-01', 2500.00),

(2, 102, 3, '2024-01-02', 900.00),

(3, 103, 2, '2024-01-02', 60.00),

(4, 104, 4, '2024-01-03', 80.00),

(5, 105, 6, '2024-01-03', 90.00);

select\*from Sales;

select sale\_id,sale\_date from Sales;

select sale\_id,sale\_date from Sales where total\_price>100;

select sale\_id,total\_price from Sales where sale\_date="2024-01-03";

select sum(quantity\_sold\*total\_price) as total\_revenue from Sales;

select sum(quantity\_sold) as total\_quantity\_sold from Sales;

select sale\_id,product\_id,total\_price from Sales where quantity\_sold>4;

select avg(total\_price) from Sales;

