

Jenny Jacob

April 8, 2024

COP 4703

Task 3

```
17  -- Get tasks sorted by due date
18  *  SELECT TaskID, Title, Description, DueDate, Completed
19      FROM Task
20      ORDER BY DueDate;
21
```

00% 1:1

Result Grid Filter Rows: Search Edit: Export/Import:

	TaskID	Title	Description	DueDate	Completed	
	1	Task 1	Task 1: walk dog	2024-04-10	1	
	2	Task 2	Task 2: finish assignment	2024-04-15	1	

```
1  *  SELECT * FROM Task
2      WHERE TaskID IN (SELECT TaskID FROM User_Task WHERE UserID = 1);
3
```

0% 1:3

Result Grid Filter Rows: Search Edit: Export/Import:

	TaskID	Title	Description	DueDate	Completed	
	1	Task 1	Task 1: walk dog	2024-04-10	1	
	2	Task 2	Task 2: finish assignment	2024-04-15	1	

```

8  SELECT * FROM Task
9  ORDER BY DueDate;
10

```

100% 1:10

Result Grid Filter Rows: Search Edit: Export/Import

TaskID	Title	Description	DueDate	Completed
1	Task 1	Task 1: walk dog	2024-04-10	1
2	Task 2	Task 2: finish assignment	2024-04-15	1
3	Task 3	Description of Task 3	2024-04-20	0

```

11 SELECT * FROM Task
12 WHERE TaskID IN (SELECT TaskID FROM Task_ListCategory WHERE CategoryID = 1);
13

```

100% 1:13

Result Grid Filter Rows: Search Edit: Export/Import

TaskID	Title	Description	DueDate	Completed
1	Task 1	Task 1: walk dog	2024-04-10	1

```

14 SELECT ListCategory.CategoryName, COUNT(Task_ListCategory.TaskID) AS TaskCount
15 FROM ListCategory
16 LEFT JOIN Task_ListCategory ON ListCategory.CategoryID = Task_ListCategory.CategoryID
17 GROUP BY ListCategory.CategoryName;
18

```

100% 1:18

Result Grid Filter Rows: Search Export

CategoryName	TaskCount
Personal	1
Work	2

My Sql Code:

-- Create User table

CREATE TABLE User (

UserID INT AUTO_INCREMENT PRIMARY KEY,

```
Username VARCHAR(50) NOT NULL,  
Password VARCHAR(50) NOT NULL,  
Email VARCHAR(100) NOT NULL  
);
```

```
-- Create Task table
```

```
CREATE TABLE Task (  
    TaskID INT AUTO_INCREMENT PRIMARY KEY,  
    Title VARCHAR(100) NOT NULL,  
    Description TEXT,  
    DueDate DATE,  
    Completed BOOLEAN DEFAULT 0  
);
```

```
-- Create ListCategory table
```

```
CREATE TABLE ListCategory (  
    CategoryID INT AUTO_INCREMENT PRIMARY KEY,  
    CategoryName VARCHAR(50) NOT NULL  
);
```

```
-- Create User_Task table for many-to-many relationship between User and Task
```

```
CREATE TABLE User_Task (  
    UserID INT,
```

```

TaskID INT,

PRIMARY KEY (UserID, TaskID),

FOREIGN KEY (UserID) REFERENCES User(UserID),

FOREIGN KEY (TaskID) REFERENCES Task(TaskID)

);

-- Create Task_ListCategory table for many-to-many relationship between Task and ListCategory

CREATE TABLE Task_ListCategory (

TaskID INT,

CategoryID INT,

PRIMARY KEY (TaskID, CategoryID),

FOREIGN KEY (TaskID) REFERENCES Task(TaskID),

FOREIGN KEY (CategoryID) REFERENCES ListCategory(CategoryID)

);

-- Insert sample data into User table

INSERT INTO User (UserID, Username, Password, Email) VALUES

(1, 'user1', 'password1', 'user1@example.com'),

(2, 'user2', 'password2', 'user2@example.com');

-- Insert sample data into Task table

INSERT INTO Task (TaskID, Title, Description, DueDate, Completed) VALUES

(1, 'Task 1', 'Task 1: walk the dog ', '2024-04-10', false),

(2, 'Task 2', 'Task 2: finish assignment', '2024-04-15', true);

```

-- Insert sample data into ListCategory table

INSERT INTO ListCategory (CategoryID, CategoryName) VALUES

(1, 'Personal'),

(2, 'Work');

-- Insert sample data into User_Task table

INSERT INTO User_Task (UserID, TaskID) VALUES

(1, 1),

(1, 2),

(2, 2);

-- Insert sample data into Task_ListCategory table

INSERT INTO Task_ListCategory (TaskID, CategoryID) VALUES

(1, 1),

(1, 2),

(2, 2);

SELECT * FROM Task

WHERE TaskID IN (SELECT TaskID FROM User_Task WHERE UserID = 1);

UPDATE Task

SET Completed = 1

WHERE TaskID = 1;

SELECT * FROM Task

```
ORDER BY DueDate;

SELECT * FROM Task

WHERE TaskID IN (SELECT TaskID FROM Task_ListCategory WHERE CategoryID = 1);

SELECT ListCategory.CategoryName, COUNT(Task_ListCategory.TaskID) AS TaskCount

FROM ListCategory

LEFT JOIN Task_ListCategory ON ListCategory.CategoryID = Task_ListCategory.CategoryID

GROUP BY ListCategory.CategoryName;
```