First task: Combine two tables in one (Vertically)

We have two tables, student table and books table. We want to combine them in one table called joined_table, so after we create joined table we do this Queary:

INSERT INTO joined_table

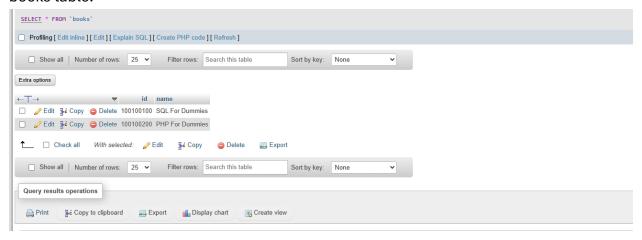
SELECT id, name FROM books

UNION

SELECT id, name FROM student

make sure that the new table has exactly the same column numbers as the combined two

books table:



student table:



joined table:



There is also UNION ALL that make it with dublicates but since we don't have any here I didn't use it.

Second task: Many to Many realshionship

Let say we have students table that have [ID (PK), name] and course table that have [ID (PK), name] now I want to combine them in one table that called studend_course that have [student_ID (FK), Student_name, Course_ID (FK), Course_name]

Each student can have multi course and each course can have multiable student therefore the realashionship is many to many.

Course table:



Students table:



Now we create the relashion table (many to many)

```
CREATE TABLE student_course (
student_id INT,
course_id INT,
FOREIGN KEY (student_id) REFERENCES students(id),
FOREIGN KEY (course_id) REFERENCES course(id)
);
```

After that we INSERT student id and what course they are studing

INSERT INTO student_course (student_id, course_id) VALUES

```
(1, 222), (1,777), (1,369),
```

Now let say we want to view students name course name all in one

SELECT students.name, course.name FROM student_course

JOIN students ON student_course.student_id = students.id

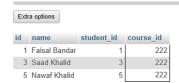
JOIN course ON student_course.course_id = course.id;



What if we want to view who are registter in a course? we can also do that like this

SELECT * FROM students JOIN student_course ON students.id = student_course.student_id

WHERE student_course.course_id = 222



Task 3: Delete dublicate in a table.

Let say we have this table



There is a lot of duplicates so how can we delete them ?? by using this:

DELETE f1 FROM products f1, products f2

WHERE f1.pName = f2.pName

AND f1.id > f2.id

Note: we only deleted the one with the highest id since it was add last.

There is a lot of ways to delete duplicates like groub by, but this is the simplest one.

Here is the result:

