

Problem#4_2: SQL CREATE

The two database tables should have a one to many (1:M) relationship with each other. Imagine a business scenario that would require the 1:M relationship and create two entities (tables) that implement the 1:M.

Solution:

The screenshot shows a PostgreSQL client interface. At the top, the connection is set to 'Keyin College/postgres@PostgreSQL 16'. Below the connection bar is a toolbar with icons for file operations, query execution, and other database functions. The main area is divided into two tabs: 'Query' and 'Query History'. The 'Query' tab is active, displaying a SQL query that inserts three records into the 'Teachers' table. Below the query, the 'Data Output' tab is active, showing a table with two columns: 'Teacher_ID' (integer, primary key) and 'Teacher_Name' (character varying (80)). The table contains three rows of data.

```
1 INSERT INTO public."Teachers" ("Teacher_Name")
2 VALUES ('Peter Rawsthor'),
3         ('Qurrat-UL-Ain Malik'),
4         ('Suresh Kumar');
```

Teacher_ID	Teacher_Name
1	Peter Rawsthor
2	Suresh Kumar
3	Qurrat-UL-Ain Malik

Keyin College/postgres@PostgreSQL 16

Query Query History

```

1 INSERT INTO public."Courses"("Course_Name", "Teacher_ID")
2 VALUES ('Full-Stack Javascript', 2),
3         ('Advanced Programming', 3),
4         ('Database Programming', 2),
5         ('Cloud Development', 4)
6 RETURNING *;
7

```

Data Output Messages Notifications

	Course_ID [PK] integer	Course_Name character varying (80)	Teacher_ID integer
1	1	Full-Stack Javascript	2
2	2	Advanced Programming	3
3	3	Database Programming	2
4	4	Cloud Development	4

Query Query History

```

1 SELECT course_id, course_name, teacher_name FROM public."Courses"
2 INNER JOIN public."Teachers" ON public."Courses".teacher_id = public."Teachers".teacher_id
3

```

Data Output Messages Notifications

	course_id integer	course_name character varying (80)	teacher_name character varying (80)
1	1	Full-Stack Javascript	Peter Rawsthor
2	2	Advanced Programming	Qurrat-UL-Ain Malik
3	3	Database Programming	Peter Rawsthor
4	4	Cloud Development	Suresh Kumar