

INSTITUTO TECNOLOGICO DE MEXICALI

Carrera:

Ing. en Sistemas Computacionales

Materia:

Fundamentos de base de datos.

Alumno:

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Actividad:

Tarea 3 Unidad 3

Profesor:

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```
create table students(  
students_id serial primary key,  
first_name VARCHAR(50) not null,  
last_name varchar(50) not null,  
email varchar(50) unique not null  
);
```

```
create table courses (  
course_id serial primary key,  
title varchar(50) not null,  
credit int not null CHECK(credit>0)  
);
```

```
create table enrollments (  
enrollment_id serial primary key,  
students_id int not null references students(students_id),  
course_id int not null references courses(course_id),  
enrolled_on date default current_date,  
unique(students_id,course_id)  
);
```

```
alter table Students  
add column birth_date DATE;
```

```
alter table Courses  
alter column credit TYPE SMALLINT;
```

```
alter table enrollments  
rename to registrations;
```

```
alter table Students  
drop column birth_date;
```

```
drop table Registrations;
```

```
select  
    concat(s.first_name, ' ', s.last_name) AS full_name,  
    c.title AS course_title,  
    e.enrolled_on  
from  
    students s  
inner join  
    enrollments e ON s.student_id = e.student_id  
inner join  
    courses c ON e.course_id = c.course_id  
where  
    c.credit >= 4;
```

```
WITH EnrollmentCounts AS (  
  SELECT  
    student_id,  
    COUNT(*) AS total_enrollments  
  FROM  
    enrollments  
  GROUP BY  
    student_id  
)  
SELECT  
  CONCAT(s.first_name, ' ', s.last_name) AS full_name,  
  ec.total_enrollments  
FROM  
  EnrollmentCounts ec  
INNER JOIN  
  Students s ON s.student_id = ec.student_id  
WHERE  
  ec.total_enrollments > 1  
ORDER BY  
  ec.total_enrollments DESC;
```