Bases de Datos

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UD3 - Práctica 5.

Índice

Corregir error

Error Code: 1452. Cannot add or update a child row: a foreign key constraint fails (`ud3_ac5`.`dept_emp`, CONSTRAINT `dept_emp_ibfk_1` FOREIGN KEY (`emp_no`) REFERENCES `employees` (`emp_no`) ON DELETE CASCADE).

El error Error Code: 1452. Cannot add or update a child row: a foreign key constraint fails indica que se está intentando insertar o actualizar un registro en la tabla dept_emp con un valor de dept_no que no existe en la tabla departments.

Para resolver este error del script, al insertar lo primero tiene que ir `departments`, `employees`, y luego `dept_emp`.

```sql
-- 1. lista el nombre del departamento actual de cada empleado.
select e.first_name, e.last_name, d.dept_name
from employees e
join dept_emp de on e.emp_no = de.emp_no
join departments d on de.dept_no = d.dept_no
where current_date between de.from_date and de.to_date;
```

first_name	last_name	dept_name
Huan	Lortz	Customer Service
Basil	Tramer	Customer Service
Breannda	Billingsley	Customer Service
Jungsoon	Syrzycki	Customer Service
Georgi	Facello	Development
Anneke	Preusig	Development
Patricio	Bridgland	Development
Berni	Genin	Development
Shahaf	Famili	Development
Bojan	Montemayor	Development
Divier	Reistad	Development
Karsten	Joslin	Development
Pradeep	Makrucki	Development
Yishay	Tzvieli	Development
Brendon	Bernini	Development
Ebbe	Callaway	Development
Anoosh	Peyn	Development
Satosi	Awdeh	Development
Kwee	Schusler	Development
Hironoby	Sidou	Development
Mokhtar	Bernatsky	Development
Erez	Ritzmann	Development
Danel	Mondadori	Development
Kshitij	Gils	Development
Amabile	Gomatam	Development
Valdiodio	Niizuma	Development
Alejandro	McAlpine	Finance
Kyoichi	Maliniak	Human Resources
Eberhardt	Terkki	Human Resources
Adamantios	Portugali	Human Resources

Result 1 ×   Result 2   Result 3   Result 4

```sql
-- 2. muestra el salario actual de cada empleado y su nombre y apellidos.
select e.first_name, e.last_name, s.salary
from employees e
join salaries s on e.emp_no = s.emp_no
where current_date between s.from_date and s.to_date;
```

first_name	last_name	salary
Georgi	Facello	88958
Bezalel	Simmel	72527
Parto	Bamford	43311
Chirstian	Koblick	74057
Kyoichi	Maliniak	94692
Anneke	Preusig	59755
Tzvetan	Zielinski	88070
Sumant	Peac	94409
Duangkaew	Piveteau	80324
Patricio	Bridgland	54423
Eberhardt	Terkki	68901
Berni	Genin	60598
Kazuhito	Cappelletti	77935
Cristinel	Bouloucos	99651
Kazuhide	Peha	84672
Lillian	Haddadi	50032
Mayuko	Warwick	47017
Shahaf	Famili	41348
Bojan	Montema…	50113
Suzette	Pettey	96646
Yongqiao	Berztiss	66313
Divier	Reistad	46145
Otmar	Herbst	77777
Elvis	Demeyer	88806
Karsten	Joslin	56689
Jeong	Reistad	69539
Alain	Chappelet	68755
Adamantios	Portugali	63053
Pradeep	Makrucki	60574
Huan	Lortz	64254

Result 1   Result 2 ✕   Result 3

```sql
-- 3. obtén la lista completa de jefes actuales de departamento y sus títulos.
select e.first_name, e.last_name, t.title, d.dept_name
from employees e
join dept_manager dm on e.emp_no = dm.emp_no
join departments d on dm.dept_no = d.dept_no
join titles t on e.emp_no = t.emp_no
where current_date between dm.from_date and dm.to_date
and current_date between t.from_date and t.to_date;
```

first_name	last_name	title	dept_name
Parto	Bamford	Senior Engineer	Production
Yinghua	Dredge	Senior Staff	Finance

Result 1   Result 2   Result 3 ✕   Result 4   Result

```sql
-- 4. enumera los 3 departamentos con más empleados en la actualidad.
select d.dept_name, count(de.emp_no) as num_employees
from departments d
join dept_emp de on d.dept_no = de.dept_no
where current_date between de.from_date and de.to_date
group by d.dept_name
order by num_employees desc
limit 3;
```

| dept_name	num_employees
Development	22
Production	20
Sales	11

Result 1   Result 2   Result 3   Result 4 ×

```sql
-- 5. enumera a todos los empleados que han trabajado en el mismo departamento durante más de 2 años.
select e.first_name, e.last_name, d.dept_name, de.from_date, de.to_date
from employees e
join dept_emp de on e.emp_no = de.emp_no
join departments d on de.dept_no = d.dept_no
where current_date between de.from_date and de.to_date
and datediff(current_date, de.from_date) > 730;  -- 730 días ≈ 2 años
```

first_name	last_name	dept_name	from_date	to_date
Huan	Lortz	Customer Service	1989-09-20	9999-01-01
Basil	Tramer	Customer Service	1992-05-04	9999-01-01
Breannda	Billingsley	Customer Service	1992-11-11	9999-01-01
Jungsoon	Syrzycki	Customer Service	1992-03-21	9999-01-01
Georgi	Facello	Development	1986-06-26	9999-01-01
Anneke	Preusig	Development	1990-08-05	9999-01-01
Patricio	Bridgland	Development	1992-12-18	9999-01-01
Berni	Genin	Development	1993-12-29	9999-01-01
Shahaf	Famili	Development	1999-09-03	9999-01-01
Bojan	Montemayor	Development	1999-09-27	9999-01-01
Divier	Reistad	Development	1995-04-02	9999-01-01
Karsten	Joslin	Development	1991-09-01	9999-01-01
Pradeep	Makrucki	Development	1990-12-05	9999-01-01
Yishay	Tzvieli	Development	1990-10-20	9999-01-01
Brendon	Bernini	Development	1990-02-01	9999-01-01

Result 1   Result 2   Result 3   Result 4   Result 5 ×   Result 6

```sql
-- 6. calcula el salario medio por departamento entre los empleados que actualmente trabajan en él.
select d.dept_name, avg(s.salary) as avg_salary
from departments d
join dept_emp de on d.dept_no = de.dept_no
join salaries s on de.emp_no = s.emp_no
where current_date between de.from_date and de.to_date
and current_date between s.from_date and s.to_date
group by d.dept_name;
```

dept_name	avg_salary
Customer Service	76692.7500
Development	64348.4545
Finance	94161.0000
Human Resources	69650.3000
Marketing	86096.5000
Production	71607.3000
Quality Management	83941.0000
Research	72375.2857
Sales	87200.4545

Result 1   Result 2   Result 3   Result 4   Result 5   Result 6 ×

```sql
-- 7. muestra al empleado mejor pagado de cada departamento entre los que trabajan actualmente.
select e.first_name, e.last_name, d.dept_name, s.salary
from employees e
join dept_emp de on e.emp_no = de.emp_no
join departments d on de.dept_no = d.dept_no
join salaries s on e.emp_no = s.emp_no
where current_date between de.from_date and de.to_date
and current_date between s.from_date and s.to_date
and s.salary = (select max(s1.salary)
                from salaries s1
                where s1.emp_no = e.emp_no
                and current_date between s1.from_date and s1.to_date);
```

first_name	last_name	dept_name	salary
Georgi	Facello	Development	88958
Bezalel	Simmel	Sales	72527
Parto	Bamford	Production	43311
Chirstian	Koblick	Production	74057
Kyoichi	Maliniak	Human Resources	94692
Anneke	Preusig	Development	59755
Tzvetan	Zielinski	Research	88070
Sumant	Peac	Quality Management	94409
Duangkaew	Piveteau	Quality Management	80324
Patricio	Bridgland	Development	54423
Eberhardt	Terkki	Human Resources	68901
Berni	Genin	Development	60598
Kazuhito	Cappelletti	Sales	77935
Cristinel	Bouloucos	Marketing	99651
Kazuhide	Peha	Production	84672

Result 1   Result 2   Result 3   Result 4   Result 5   Result 6   Result 7 ×

```sql
-- 8. muestra los detalles del jefe actual de departamentos con el salario más bajo.
select e.first_name, e.last_name, d.dept_name, s.salary
from employees e
join dept_manager dm on e.emp_no = dm.emp_no
join departments d on dm.dept_no = d.dept_no
join salaries s on e.emp_no = s.emp_no
where current_date between dm.from_date and dm.to_date
and current_date between s.from_date and s.to_date
and s.salary = (select min(s2.salary)
                from salaries s2
                join dept_manager dm2 on s2.emp_no = dm2.emp_no
                where current_date between dm2.from_date and dm2.to_date
                and current_date between s2.from_date and s2.to_date);
```

	first_name	last_name	dept_name	salary
▶	Parto	Bamford	Production	43311

Result 1   Result 2   Result 3   Result 4   Result 5   Result 6   Result 7   Result 8 ✕

```sql
-- 9. muestra el salario, título, nombre y apellido del primer empleado contratado por la empresa.
select s.salary, t.title, e.first_name, e.last_name
from employees e
join titles t on e.emp_no = t.emp_no
join salaries s on e.emp_no = s.emp_no
where e.hire_date = (select min(hire_date) from employees)
and current_date between s.from_date and s.to_date
and current_date between t.from_date and t.to_date;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

salary	title	first_name	last_name
94409	Senior Engineer	Sumant	Peac

Result 1　Result 2　Result 3　Result 4　Result 5　Result 6　Result 7　Result 8　Result 9 ✕