

Stored procedures

database gestion

1. List the details of the employees of a given office as well as the information of the office they are assigned to. If the office has no employees, the office information will be displayed as well as NULL values in the fields corresponding to the employees.

The procedure has one input parameter which is the office number.

```
USE gestion;
DELIMITER $$
DROP PROCEDURE IF EXISTS empleados_oficina$$
CREATE PROCEDURE empleados_oficina(IN ofi int)
BEGIN
  SELECT *
  FROM oficinas O LEFT JOIN empleados E ON O.oficina=E.oficina
  WHERE O.oficina = ofi;
END
$$
```

```
USE gestion;
CALL empleados_oficina(12); --returns several employees
```

```
CALL empleados_oficina(40); --it has no employees (maybe you must create it first)
```

2. Now we want to make the output of the previous SP clearer. We are going to create an SP that is like the previous one but it shows the following text: “Details of office XX:”, where XX will be the office number.

```
USE gestion;
DELIMITER $$
DROP PROCEDURE IF EXISTS empleados_oficina2$$
CREATE PROCEDURE empleados_oficina2(IN ofi int)
BEGIN
    SELECT 'Detalle de la oficina', ofi, ': ', E.*
    FROM oficinas O LEFT JOIN empleados E ON O.oficina=E.oficina
    WHERE O.oficina = ofi;
END
$$
```

```
USE gestion;
CALL empleados_oficina2(12);
```

```
CALL empleados_oficina2(40);
```

3. Now, we want to evolve the output of the results and check if the office exists.

```
USE gestion;
DELIMITER $$
DROP PROCEDURE IF EXISTS empleados_oficina3$$
CREATE PROCEDURE empleados_oficina3(IN ofi int)
BEGIN
    DECLARE cont INT;
    SET cont = (SELECT COUNT(oficina) FROM oficinas WHERE oficina = ofi);
    IF cont >= 1 THEN
        SELECT 'Detalle de la oficina', ofi, ': ', E.*
        FROM oficinas O LEFT JOIN empleados E ON O.oficina = E.oficina
        WHERE O.oficina = ofi;

    ELSE SELECT 'La oficina ', ofi, ' no existe';
    END IF;
END$$
```

```
USE gestion;
CALL empleados_oficina2(12);
```

```
CALL empleados_oficina2(50); -- it doesn't exist
```

4. Obtain statistics on the number of orders and total amount sold by a certain employee (representative). If the representative has no orders, an empty table will be displayed.

```
USE gestion;
DELIMITER $$
DROP PROCEDURE IF EXISTS pedidos_rep$$
CREATE PROCEDURE pedidos_rep(IN emple int)
BEGIN
    SELECT P.rep, E.nombre, COUNT(*) AS num_pedidos, SUM(importe) AS total_vendido
    FROM empleados E INNER JOIN pedidos P ON E.numemp=P.rep
    WHERE P.rep = emple
    GROUP BY P.rep, E.nombre;
END
$$
```

```
USE gestion;
CALL pedidos_rep(105);
```

```
CALL pedidos_rep(200); -- it doesn't exist
```

5. Now, if the representative has no orders in table pedidos, display a message.

```
USE gestion;
DELIMITER $$
DROP PROCEDURE IF EXISTS pedidos_rep2$$
CREATE PROCEDURE pedidos_rep2(IN emple int)
BEGIN
DECLARE cont INT;
SET cont = (SELECT COUNT(rep) FROM pedidos WHERE rep = emple);
IF cont >= 1 THEN
SELECT P.rep, E.nombre, COUNT(*) AS num_pedidos, SUM(importe) AS total_vendido
FROM empleados E INNER JOIN pedidos P ON E.numemp=P.rep
WHERE P.rep = emple
GROUP BY P.rep, E.nombre;

ELSE SELECT 'El representante ', emple, ' no tiene pedidos';
END IF;
END
$$
END
$$
```

```
USE gestion;
CALL pedidos_rep(105);

CALL pedidos_rep(200); -- it doesn't exist
```

6. List all orders of a certain customer in a certain month and year.

```
USE gestion;
DELIMITER $$
DROP PROCEDURE IF EXISTS pedidos_cliente_mes$$
CREATE PROCEDURE pedidos_cliente_mes(IN cli int, IN mes int, IN anyo int)
BEGIN
SELECT *
FROM pedidos
WHERE clie = cli AND MONTH(fechapedido) = mes AND YEAR(fechapedido) = anyo;
END
$$
```

```
USE gestion;
CALL pedidos_cliente_mes(2111,2,2008);
```

7. SP with an output parameter. Write a procedure that returns how many orders a given representative has placed. If the representative has no orders in the table, it will return 0.

```
USE gestion;
DELIMITER $$
DROP PROCEDURE IF EXISTS pedidos_rep2$$
CREATE PROCEDURE pedidos_rep2(IN emple int, OUT cuantos int)
BEGIN
SET cuantos = (
SELECT COUNT(*)
FROM empleados E INNER JOIN pedidos P ON E.numemp=P.rep
WHERE P.rep = emple
GROUP BY P.rep, E.nombre
);
END
$$
```

```
USE gestion;
CALL pedidos_rep2(105, @cuantos);
SELECT @cuantos;
```

```
CALL pedidos_rep2(200, @cuantos);
SELECT @cuantos;
```