Stored Procedures

Declaración de Variables – Parámetros

Ejemplo 1

1.- Se crea el Stored Procedure y se ejecuta
2.- Se genera el EXEC para ejecutar el SP y luego se ejecuta
3.- Realizamos una consulta para revisar si se cargaron o no los datos por medio del SP

```
USE Registro

CREATE PROCEDURE pr_insertarpersona (@idPersona VARCHAR(5),
                                     @nombre VARCHAR(20),
                                     @apellido VARCHAR(20),
                                     @edad TINYINT)
AS
BEGIN
            INSERT INTO Personas (IdPersona,Nombre,Apellido,Edad)
                  VALUES (@idPersona,@nombre,@apellido,@edad)
END


EXEC pr_insertarpersona 'A06','Alfonso','Pérez',35
```

Ejemplo 2

```
USE Registro

CREATE PROCEDURE pr_buscarpersona (@nombre VARCHAR(20))

AS
BEGIN
            SELECT IdPersona,Nombre,Apellido,Edad FROM Personas
            WHERE Nombre LIKE '%' + @nombre + '%'
END

EXEC pr_buscarpersona 'Alfonso'
```

Results | Messages

	IdPersona	Nombre	Apellido	Edad
1	A06	Alfonso	Pérez	33

Ejemplo 3

```
USE Registro

CREATE PROCEDURE calcularPromedio (@n1 DECIMAL(4,2),
                                   @n2 DECIMAL(4,2),
                                   @resu DECIMAL(4,2) OUTPUT)

AS
BEGIN
            SELECT @resu = (@n1 + @n2)/2
END

DECLARE @variableResultado DECIMAL (4,2)

EXEC calcularPromedio 5,6, @variableResultado OUTPUT

SELECT @variableResultado as Promedio
```

Results | Messages

	Promedio
1	5.50

Ejemplo 4

```
CREATE PROCEDURE FindEmpCount (
    @salary INT,
    @emp_count INT OUTPUT)
AS
BEGIN
    SELECT * FROM empleados
    WHERE salario > @salary;

    SELECT @emp_count = @@ROWCOUNT;
END;
```

CONTADOR

Results | Messages

	id	nombre	genero	salario
1	1	Ilka Braganca	Female	77610
2	2	Corene Alliband	Female	56320
3	3	Alphonse Jordison	Female	26870
4	4	Trey Stops	Female	22110
5	5	Harley Stork	Female	29810
6	6	Sumner Gregoraci	Male	67600
7	7	Bron Pavlovsky	Female	79440
8	8	Gray Rosin	Female	42870
9	9	Giles McMenamy	Male	21020
10	10	Verna Oboy	Male	44640

```
DECLARE @count INT;

EXEC FindEmpCount 60000, @count OUTPUT;

SELECT @count as Number_employees
```

Results | Messages

	id	nombre	genero	salario
1	1	Ilka Braganca	Female	77610
2	6	Sumner Gregoraci	Male	67600
3	7	Bron Pavlovsky	Female	79440

	Number_employees
1	3

OUTPUT y OUT es lo mismo

Ejemplo 5

```
CREATE PROCEDURE test (
      @a datetime OUT,
      @b datetime OUT)
AS
BEGIN
      SELECT @a = GETDATE() --using SELECT to assign value
      SET @b = GETDATE()    --using SET to assign value
END

DECLARE @x datetime,
        @y datetime

EXEC test @x OUT, @y OUT

SELECT @x AS 'Using SELECT',
       @y AS 'Using SET'
```

Results | Messages

	Using SELECT	Using SET
1	2022-09-12 20:11:32.427	2022-09-12 20:11:32.427

Un valor por defecto para un parámetro OUTPUT

Ejemplo 6

```
CREATE PROCEDURE FindEmpCounts (
   @zero_count INT = 0 OUTPUT)
AS
BEGIN
    DECLARE @v INT --variable to store count of rows returned
    SELECT nombre FROM empleados
    WHERE Name LIKE 'z%';
    SELECT @v = @@ROWCOUNT --saving row count in a varible

      IF @v >= 1
         BEGIN
            SELECT @v AS 'Number of Employees';
         END
      ELSE
         BEGIN
            SELECT @zero_count AS 'Number of Employees';
         END
END

EXEC FindEmpCounts
```

Results | Messages

	id	nombre	genero	salario
1	1	Ilka Braganca	Female	77610
2	2	Corene Alliband	Female	56320
3	3	Alphonse Jordison	Female	26870
4	4	Trey Stops	Female	22110
5	5	Harley Stork	Female	29810
6	6	Sumner Gregoraci	Male	67600
7	7	Bron Pavlovsky	Female	79440
8	8	Gray Rosin	Female	42870
9	9	Giles McMenamy	Male	21020
10	10	Verna Oboy	Male	44640

Results | Messages

nombre

	Number of Employees
1	0

Ejemplo 7

```
USE sample

CREATE PROCEDURE EmployeeGender
      @name VARCHAR(50),
      @gender VARCHAR(50) OUTPUT
AS
BEGIN
      SELECT @gender = [genero] FROM empleados
      WHERE nombre = @name
END

DECLARE @emp_gender VARCHAR(50)

EXEC  EmployeeGender 'Gray Rosin', @emp_gender OUTPUT

PRINT 'The Gender of this employee is ' + @emp_gender
```

```
Messages
The Gender of this employee is Female

Completion time: 2022-09-12T21:30:21.7424753-03:00
```

Ejemplo 8

```
USE Registro

CREATE PROCEDURE restarEdad (
      @idPersona VARCHAR(5),
      @edad TINYINT)
AS
BEGIN
      UPDATE Personas
        SET Edad = Edad - @edad
        WHERE IdPersona = @idPersona
END

EXEC restarEdad 'A06', 2
```