Curso de SQL Avanzado

Scotiabank | **Belatrix**

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Sesión 05

```
!pip install pymssql
```

```
Collecting pymssql
    Downloading pymssql-2.3.0-cp310-cp310-manylinux_2_28_x86_64.whl (4.6 MB)
                                ───────────── 4.6/4.6 MB 30.0 MB/s eta 0:00:00
    Installing collected packages: pymssql
    Successfully installed pymssql-2.3.0
```

```python
import pymssql

conn = pymssql.connect("3.93.192.216", "test_curso", "TestCurso$123", "test_curso")

cursor = conn.cursor()

print("Cursor creado")
```

```
    Cursor creado
```

```python
cursor.execute("""
select @@version
""")

column1, = cursor.fetchone()

print(column1)
```

```
    Microsoft SQL Server 2019 (RTM-CU25) (KB5033688) - 15.0.4355.3 (X64)
        Jan 30 2024 17:02:22
        Copyright (C) 2019 Microsoft Corporation
        Express Edition (64-bit) on Windows Server 2019 Datacenter 10.0 <X64> (Build 17763: ) (Hypervisor)
```

```python
cursor.execute("""
select id, dbo.countTodosByUserId(id) from users;
""")

user_ids = []
todos_counts = []

for id, todosCount in cursor.fetchall():
  print(f"ID: {id} | TODOS COUNT: {todosCount}")
  user_ids.append(id)
  todos_counts.append(todosCount)

print(user_ids)
print(todos_counts)

import seaborn as sns

sns.barplot(x=user_ids, y=todos_counts)
```

```
    ID: 1 | TODOS COUNT: 46
    ID: 2 | TODOS COUNT: 39
    ID: 3 | TODOS COUNT: 40
    [1, 2, 3]
    [46, 39, 40]
    <Axes: >
```

```python
cursor.execute("""
create function dbo.hello()
returns varchar(255)
as
begin
  -- TODO: Más lógica

  return 'Hello SQL Server from Function 👋'
end
""")
conn.commit()
```

```
    20 ┐ ▅▅▅▅▅▅  ▅▅▅▅▅  ▅▅▅▅▅▅   |
```

```python
cursor.execute("select dbo.hello()")

for saludo, in cursor.fetchall():
  print(saludo)
```

```
    Hello SQL Server from Function ??
    ₀ | ▅▅▅▅▅▅  ▅▅▅▅▅  ▅▅▅▅▅▅   |
```

⌄ Llamar a un procedimiento almacenado desde pymssql

```python
username = input("Nombre de usuario: ")
password = input("Contraseña: ")
firstname = input("Nombre de la persona: ")
lastnname = input("Apellidos de la persona: ")

cursor.execute(
    """
      declare @lastId int;

      execute dbo.createUser
        @username = %s,
        @password = %s,
        @firstname = %s,
        @lastname = %s,
        @insertedId = @lastId output
      ;

      select isnull(@lastId, -1);
    """,
    (username, password, firstname, lastnname)
)

id, = cursor.fetchone()

print(f"ID: {id}")

conn.commit()
```

```
    Nombre de usuario: zz
    Contraseña: zz123
    Nombre de la persona: ZZ
    Apellidos de la persona: TT
    ID: 14
```

Comienza a programar o generar con IA.