

TP : Les transactions

Brahmi Nasma

1/ - Affichage des lignes à modifier avant la transaction :

```
[17]: import mysql.connector
      from mysql.connector import errors

      try:
          conn = mysql.connector.connect(host="localhost",user="root",password="", database="exo01")

          cursor = conn.cursor()

          query_1 = "SELECT * FROM departement WHERE departement_id = 6 OR departement_id = 8"
          cursor.execute(query_1)

          data = cursor.fetchall()
          print(data)
```

Le résultat :

```
conn.close()

[(6, '06', 'Alpes-Maritimes', 'ALPES-MARITIMES', 'alpes-maritimes', 'A41256352'), (8, '08', 'Ardennes', 'ARDENNES', 'ardennes', 'A6352')]
```

2/ - La transaction qui commence avec commit :

```
[22]: import mysql.connector
      from mysql.connector import errors
      import tkinter as tk

      try:
          conn = mysql.connector.connect(host="localhost",user="root",password="", database="exo01")

          cursor = conn.cursor()

          query_1 = "SELECT * FROM departement WHERE departement_id = 6 OR departement_id = 8"
          cursor.execute(query_1)

          data = cursor.fetchall()
          print(data)

          conn.start_transaction()
          sql_update_query_1 = "UPDATE departement SET departement_nom = 'TEST TRANSACTION' WHERE departement_id = 6"
          sql_update_query_2 = "UPDATE departement SET departement_nom = 'TEST TRANSACTION 2' WHERE departement_id = 8"

          cursor.execute(sql_update_query_1)
          cursor.execute(sql_update_query_2)

          conn.commit()

          query_2 = "SELECT * FROM departement WHERE departement_id = 6 OR departement_id = 8"
          cursor.execute(query_1)

          data_2 = cursor.fetchall()
          print(data_2)

      except errors.Error as e:
          conn.rollback() # rollback changes
          print("Rolling back ...")
          print(e)

      conn.close()
```

Activer Windows
Accédez aux paramètres pour a

Le résultat :

```
[(6, '06', 'TEST TRANSACTION', 'ALPES-MARITIMES', 'alpes-maritimes', 'A41256352'), (8, '08', 'TEST TRANSACTION 2', 'ARDENNES', 'ardennes', 'A6352')]  
[(6, '06', 'TEST TRANSACTION', 'ALPES-MARITIMES', 'alpes-maritimes', 'A41256352'), (8, '08', 'TEST TRANSACTION 2', 'ARDENNES', 'ardennes', 'A6352')]
```

3/ - La transaction qui commence avec rollback :

```
25]: import mysql.connector  
from mysql.connector import errors  
import tkinter as tk  
  
try:  
    conn = mysql.connector.connect(host="localhost",user="root",password="", database="exo01")  
    cursor = conn.cursor()  
  
    query_1 = "SELECT * FROM departement WHERE departement_id = 6 OR departement_id = 8"  
    cursor.execute(query_1)  
    data = cursor.fetchall()  
    print(data)  
  
    conn.start_transaction()  
    sql_update_query_1 = "UPDATE departement SET departement_nom = 'TEST ROLLBACK' WHERE departement_id = 6"  
    sql_update_query_2 = "UPDATE departement SET departement_nom = 'TEST ROLLBACK 2' WHERE departement_id = 8"  
  
    cursor.execute(sql_update_query_1)  
    cursor.execute(sql_update_query_2)  
  
    #conn.commit()  
    conn.rollback()  
  
    query_2 = "SELECT * FROM departement WHERE departement_id = 6 OR departement_id = 8"  
    cursor.execute(query_1)  
  
    data_2 = cursor.fetchall()  
    print(data_2)  
  
except errors.Error as e:  
    conn.rollback() # rollback changes  
    print("Rolling back ...")  
    print(e)  
  
conn.close()
```

Activer Windows
Accédez aux paramètres poi

Le résultat :

```
[(6, '06', 'TEST TRANSACTION', 'ALPES-MARITIMES', 'alpes-maritimes', 'A41256352'), (8, '08', 'TEST TRANSACTION 2', 'ARDENNES', 'ardennes', 'A6352')]  
[(6, '06', 'TEST TRANSACTION', 'ALPES-MARITIMES', 'alpes-maritimes', 'A41256352'), (8, '08', 'TEST TRANSACTION 2', 'ARDENNES', 'ardennes', 'A6352')]
```

1.