

```

import mysql.connector
from mysql.connector import Error
from mysql.connector import errorcode
from datetime import datetime

try:
    # Create a connection with the database
    conn = mysql.connector.connect(host='localhost',
    database='students', user='studentadmin',
    password='TurtleDove')

    # Query used to insert data
    query = "INSERT INTO students VALUES(NULL, 'Dale', 'Cooper', 'dcooper@aol.com','123
Main St', 'Yakima', 'WA', 98901, '792-223-8901', '1959-2-22','M', NOW(), 3.50)"

    # 2. Create a parameterized query
    # query = "INSERT INTO students (student_id, first_name, last_name, email, street, city,
state, zip, phone, birth_date, sex, date_entered, lunch_cost) VALUES (%s, %s, %s, %s, %s,
%s, %s, %s, %s, %s, %s, %s, %s)"

    # 2. Get the current time and format it to fit what
    # MySQL expects
    # now_time = datetime.now()
    # format_date = now_time.strftime('%Y-%m-%d %H:%M:%S')

    # 2. Insert multiple rows
    # You must use None instead of NULL
    # students = [(None, 'Harry', 'Truman', 'htruman@aol.com', '202 South St', 'Vancouver',
'WA', 98660, '792-223-9810', '1946-1-24','M', format_date, 3.50),
    # (None, 'Shelly', 'Johnson', 'sjohnson@aol.com', '9 Pond Rd', 'Sparks', 'NV', 89431,
'792-223-6734', '1970-12-12','F', format_date, 3.50),
    # (None, 'Bobby', 'Briggs', 'bbriggs@aol.com', '14 12th St', 'San Diego', 'CA', 92101,
'792-223-6178', '1967-5-24','M', format_date, 3.50),
    # (None, 'Donna', 'Hayward', 'dhayward@aol.com', '120 16th St', 'Davenport', 'IA', 52801,
'792-223-2001', '1970-3-24','F', format_date, 3.50),
    # (None, 'Audrey', 'Horne', 'ahorne@aol.com', '342 19th St', 'Detroit', 'MI', 48222,
'792-223-2001', '1965-2-1','F', format_date, 3.50),
    # (None, 'James', 'Hurley', 'jhurley@aol.com', '2578 Cliff St', 'Queens', 'NY', 11427,
'792-223-1890', '1967-1-2','M', format_date, 3.50),
    # (None, 'Lucy', 'Moran', 'lmoran@aol.com', '178 Dover St', 'Hollywood', 'CA', 90078,
'792-223-9678', '1954-11-27','F', format_date, 3.50),
    # (None, 'Tommy', 'Hill', 'thill@aol.com', '672 High Plains', 'Tucson', 'AZ', 85701,
'792-223-1115', '1951-12-21','M', format_date, 3.50),
    # (None, 'Andy', 'Brennan', 'abrennan@aol.com', '281 4th St', 'Jacksonville', 'NC', 28540,
'792-223-8902', '1960-12-27','M', format_date, 3.50)]

    # 3. Insert multiple rows with one query
    # query = "INSERT INTO classes VALUES ('English', NULL), ('Speech', NULL), ('Literature',
NULL),('Algebra', NULL), ('Geometry', NULL), ('Trigonometry', NULL), ('Calculus', NULL), ('Earth
Science', NULL), ('Biology', NULL), ('Chemistry', NULL), ('Physics', NULL), ('History', NULL),
('Art', NULL), ('Gym', NULL));

    # 4. Enter test data

```

```
# query = "INSERT INTO tests VALUES ('2014-8-25', 'Q', 15, 1, NULL), ('2014-8-27', 'Q', 15, 1, NULL), ('2014-8-29', 'T', 30, 1, NULL), ('2014-8-29', 'T', 30, 2, NULL), ('2014-8-27', 'Q', 15, 4, NULL), ('2014-8-29', 'T', 30, 4, NULL)"
```

```
# 5. Insert score data
```

```
# query = "INSERT INTO scores VALUES (1, 1, 15),(1, 2, 14),(1, 3, 28),(1, 4, 29),(1, 5, 15),(1, 6, 27),(2, 1, 15),(2, 2, 14),(2, 3, 26),(2, 4, 28),(2, 5, 14),(2, 6, 26),(3, 1, 14),(3, 2, 14),(3, 3, 26),(3, 4, 26),(3, 5, 13),(3, 6, 26),(4, 1, 15),(4, 2, 14),(4, 3, 27),(4, 4, 27),(4, 5, 15),(4, 6, 27),(5, 1, 14),(5, 2, 13),(5, 3, 26),(5, 4, 27),(5, 5, 13),(5, 6, 27),(6, 1, 13),(6, 2, 13),(6, 4, 26),(6, 5, 13),(6, 6, 26),(7, 1, 13),(7, 2, 13),(7, 3, 25),(7, 4, 27),(7, 5, 13),(8, 1, 14),(8, 3, 26),(8, 4, 23),(8, 5, 12),(8, 6, 24),(9, 1, 15),(9, 2, 13),(9, 3, 28),(9, 4, 27),(9, 5, 14),(9, 6, 27),(10, 1, 15),(10, 2, 13),(10, 3, 26),(10, 4, 27),(10, 5, 12),(10, 6, 22)"
```

```
# 6. Insert absences
```

```
# query = "INSERT INTO absences VALUES (6, '2014-08-29'),(7, '2014-08-29'),(8, '2014-08-27')"
```

```
# The cursor object provides methods we can use to
```

```
# interact with the database
```

```
cursor = conn.cursor()
```

```
# Execute the query
```

```
# cursor.execute(query)
```

```
# 2. Insert multiple rows of data from the list
```

```
# cursor.executemany(query, students)
```

```
# 3. Insert multiple rows with one query
```

```
cursor.execute(query)
```

```
# Send the transaction to MySQL
```

```
conn.commit()
```

```
print("Data Entered")
```

```
# Reset results and close the cursor
```

```
cursor.close()
```

```
# Catch any errors
```

```
except mysql.connector.Error as error:
```

```
    print("Error :", error)
```

```
# Always executes and makes sure the DB connection is
```

```
# released
```

```
finally:
```

```
    if(conn.is_connected()):
```

```
        conn.close()
```

```
        print("Database Connection Closed")
```