

# Python

## Creare una tabella SQLite3

```
import sqlite3
conn = sqlite3.connect('tutorial.db') # Don't forget to connect to db!
c = conn.cursor() # think of it like a mouse cursor

# def create_table():
#     c.execute("CREATE TABLE example(Language VARCHAR, Version REAL, Skill TEXT)")

def enter_data():
    c.execute("INSERT INTO example VALUES('Python', 2.7, 'Beginner')")
    c.execute("INSERT INTO example VALUES('Python', 3.3, 'Intermediate')")
    c.execute("INSERT INTO example VALUES('Python', 3.4, 'Expert')")
    conn.commit()

# create_table()
enter_data()
conn.close()
```

## Aggiungere dati a una tabella SQLite3

```
import sqlite3

conn = sqlite3.connect('tutorial.db') # Don't forget to connect to db!
c = conn.cursor() # think of it like a mouse cursor

# def create_table():
#     c.execute("CREATE TABLE example(Language VARCHAR, Version REAL, Skill TEXT)")

def enter_data():
    c.execute("INSERT INTO example VALUES('Python', 2.7, 'Beginner')")
    c.execute("INSERT INTO example VALUES('Python', 3.3, 'Intermediate')")
    c.execute("INSERT INTO example VALUES('Python', 3.4, 'Expert')")
    conn.commit() # Instead of closing the db every time you enter data,
    # and then reopen it, you run .commit() to update the db table with your data
```

```
# create_table() # Runs the function create_table()
enter_data() # Runs the function enter_data()
conn.close() # this is only needed at the very end of the program. Use the .commit() instead.
```

## Leggere dati da una tabella SQLite3

```
import sqlite3
```

```
conn = sqlite3.connect('tutorial.db') # Don't forget to connect to db!
c = conn.cursor() # think of it like a mouse cursor
```

```
# def create_table():
#     c.execute("CREATE TABLE example(Language VARCHAR, Version REAL, Skill TEXT)")
#
#
# def enter_data():
#     c.execute("INSERT INTO example VALUES('Python', 2.7, 'Beginner')")
#     c.execute("INSERT INTO example VALUES('Python', 3.3, 'Intermediate')")
#     c.execute("INSERT INTO example VALUES('Python', 3.4, 'Expert')")
#     conn.commit() # Instead of closing the db every time you enter data,
#     # and then reopen it, you run .commit() to update the db table with your data
#
#
# def enter_dynamic_data():
#     lang = input("What language?: ")
#     version = float(input("What version?: "))
#     skill = input("What skill level?: ")
#
#     c.execute("INSERT INTO example (Language, Version, Skill) VALUES (?, ?, ?) ", (lang, version, skill))
#     # This is the actual interface of the input data, placing it into the db.
#
#
#     conn.commit()
```

```
def read_from_database():
    # Example 1: Universal Print All
    sql = "SELECT * FROM example"
    for row in c.execute(sql):
        print(row)

    # Example 2: Print only WHERE Skill == 'Beginner'
    sql = "SELECT * FROM example WHERE Skill == 'Beginner'"
    for row in c.execute(sql):
        print(row)

    # Example 3: Print User Input Choice of Skill
```

```
what_skill = input("What skill are you looking for?: ")
sql = "SELECT * FROM example WHERE Skill = ?"
for row in c.execute(sql, [(what_skill)]):
    print(row)
```

# Example 4: Print User Input Multiple Choices of Skill and Language

```
what_skill = input("What skill are you looking for?: ")
what_lang = input("What language?: ")
sql = "SELECT * FROM example WHERE Skill = ? AND Language = ?"
for row in c.execute(sql, [(what_skill), (what_lang)]):
    print(row)
```

```
# create_table() # Only needs to be run once! More than once creates an error.
# enter_data() # Runs the function enter_data()
# enter_dynamic_data()
read_from_database()
```

conn.close() # this is only needed at the very end of the program. Use the .commit() instead.