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# Introduction

<https://www.w3schools.com/python/python_mysql_getstarted.asp>

MySQL Connector/Python enables Python programs to access MySQL databases, using an API.

MySQL Connector/Python includes support for:

* Almost all features provided by MySQL Server up to and including MySQL Server version 8.0.
* Connector/Python 8.0 also supports X DevAPI.
* Converting parameter values back and forth between Python and MySQL data types, for example Python datetime and MySQL DATETIME. You can turn automatic conversion on for convenience, or off for optimal performance.
* All MySQL extensions to standard SQL syntax.
* Protocol compression, which enables compressing the data stream between the client and server.
* Connections using TCP/IP sockets and on Unix using Unix sockets.
* Secure TCP/IP connections using SSL.
* Self-contained driver. Connector/Python does not require the MySQL client library or any Python modules outside the standard library.

## Install Connector/Python

Use **pip** to install Connector/Python on most any operating system:

$ python -m pip install mysql-connector-python

**For Windows**:

* MySQL Installer (recommended): When executing [MySQL Installer](https://dev.mysql.com/doc/refman/8.0/en/mysql-installer.html), choose MySQL Connector/Python as one of the products to install. MySQL Installer installs the Windows MSI Installer described in this documentation.
* You can download and install from <https://dev.mysql.com/downloads/connector/python/>

**Linux Using the MySQL Yum Repository:**

$ sudo yum update mysql-community-release

**Sample Employees Database**: https://github.com/datacharmer/test\_db

Sample code: <https://github.com/AjaySingala/PythonSamples/tree/main/MySQL>

Demo code files:

1. TestConnection.py
2. CreateDB.py
3. CreateTable.py
4. Insert.py
5. GetInsertedId.py
6. InsertMany.py
7. Select.py
8. SelectWhere.py (*also has Wildcard demo*)
9. Limit.py
10. Update.py
11. OrderBy.py
12. Delete.py
13. DropTable.py
14. Join.py

For the Join.py demo:

You can combine rows from two or more tables, based on a related column between them, by using a JOIN statement.

Consider you have a "users" table and a "products" table:

**users**

{id: 1, name: 'John', fav: 154},

{id: 2, name: 'Peter', fav: 154},

{id: 3, name: 'Amy', fav: 155},

{id: 4, name: 'Hannah', fav:},

{id: 5, name: 'Michael', fav:}

**products**

{id: 154, name: 'Chocolate Heaven'},

{id: 155, name: 'Tasty Lemons'},

{id: 156, name: 'Vanilla Dreams'}

These two tables can be combined by using users' fav field and products' id field.

## More Complex Samples

<https://dev.mysql.com/doc/connector-python/en/connector-python-examples.html>

The Employees database is available from [Employees DB on GitHub](https://github.com/datacharmer/test_db) (<https://github.com/datacharmer/test_db>). You can download a prepackaged archive of the data, or access the information through Git.

Source code: