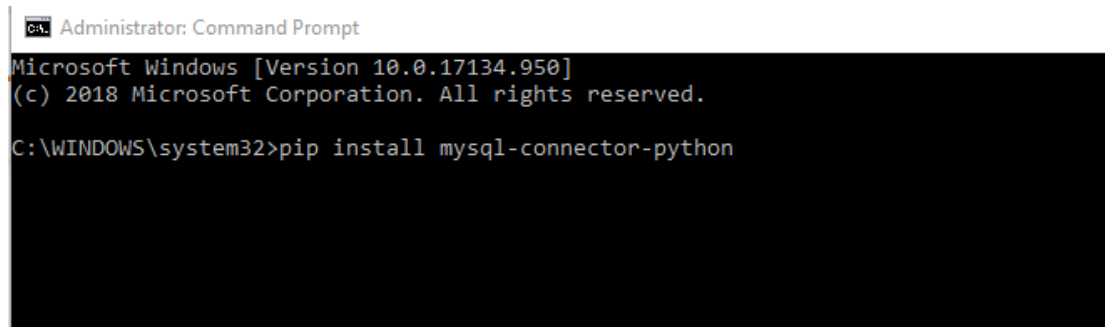This module guides you on how to connect MySQL database through your Python application with **MySQL Connector** package.

It is necessary to have MySQL driver in order for Python to be able to connect with MySQL database. MySQL driver doesn't install by default with Python. So the first step is to install the driver. The most widely used driver for Python 3 is "**MySQL connector**".

Installing MySQL connector

The recommended way of installing MySQL connector is by installing the package with *Python package manager (PIP).* You can execute below command in the command prompt to install MySQL connector.

```
pip install mysql-connector-python
```


Above command will successfully install MySQL connector.

Note:-

Above method is only possible if you add Python to Windows path at the initial Python installation. So if you have not done this at the initial Python installation, you can do so by re-installing Python.

For this you need to start Python installer and tick "**Add Python 3.8 to PATH**".
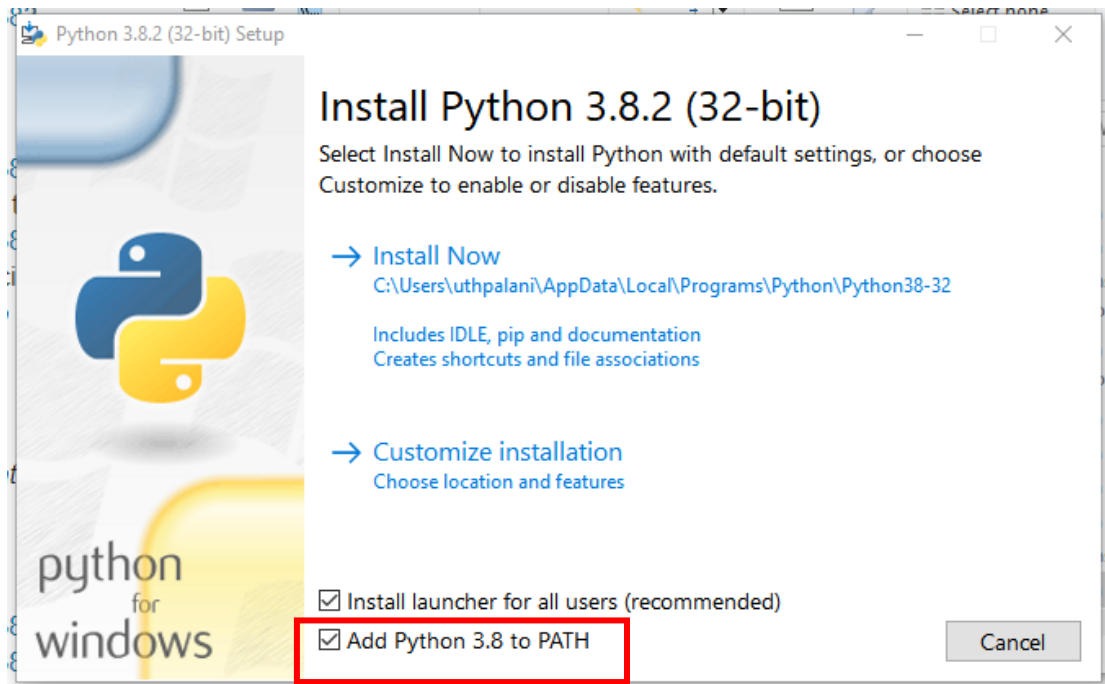
Creating a database connection

In Python, "connect()" is the constructor that use to create a connection to MySQL server.

Let's create the database "student" and go through below steps to create the database connection from your Python application.

- First import MySQL Connector Python module in your program

```
import mysql.connector
```

- Establish MySQL database Connection from Python

    For this, use MySQL connect constructor to connect to your database as below.

```
mydb = mysql.connector.connect(
    host     = 'localhost',
    database = 'student'
    user     = 'root',
    password = '',
)
```

"host" - Name of the server/ IP address which MySQL is running

"database" - Name of the database

"user" - Username that you use to work with MySQL

"password" - Password given by user when installing MySQL

- Verify MySQL connection is successful

  `connection.is_connected()`

- Close MySQL database connection

  `connection.close()`

Based on above steps, complete Python code can be given as below.

```python
import mysql.connector

conn = mysql.connector.connect(
    host='localhost',
    user='root',
    password='',
    database='student'
)

if conn.is_connected():# check database connection successful
    print("Successfully connect to database!")
    conn.close()
```