連結MS-SQL

朱克剛

安裝驅動程式 – for Windows

- 需安裝 pyodbc
  - *http://mkleehammer.github.io/pyodbc/*

安裝驅動程式 – for 樹莓派

- 需安裝以下程式
    - *$sudo apt-get install python-pyodbc odbc-postgresql tdsodbc unixodbc-bin*

- $ sudo vi /etc/odbcinst.ini
    - *加上*
      [FreeTDS]
      Description=FreeTDS unixODBC Driver
      Driver = /usr/lib/arm-linux-gnueabihf/odbc/libtdsodbc.so
      Setup = /usr/lib/arm-linux-gnueabihf/odbc/libtdsS.so

第１步：匯入模組

```
#coding=utf-8
import pyodbc
```

第2步：設定 Connection String
for Windows

```
server = 'tcp:1.2.3.4'
database = 'database_name'
username = 'user'
password = 'user_password'

connectionstring = 'DRIVER={ODBC Driver 13 for SQL
Server};SERVER='+server+';DATABASE='+database+';UID='+username+';PW
D='+ password
```

第2步：設定 Connection String
for 樹莓派

```
server = '1.2.3.4'
database = 'database_name'
username = 'user'
password = 'user_password'

connectionstring = 'driver={FreeTDS};server=' + server +
';port=1433;database=' + database + ';uid=' + username + ';pwd=' +
password + ';TDS_Version=7.2'
```

第3步：連線與建立cursor

```
conn = pyodbc.connect(connectionstring)
cursor = conn.cursor()
```

第４步：查詢資料

```
cursor.execute("SELECT * FROM UserInfo WHERE uid = ?", "A01")
row = cursor.fetchone()
while row:
    print (row.uid + " | " + row.cname)
    row = cursor.fetchone()
```

第5步：新增、修改、刪除

■ Autocommit 在 pyodbc 預設為 false，因此最後必須 commit 資料才會寫回資料庫

```
cursor.execute("INSERT INTO UserInfo (uid, cname) VALUES (?, ?)", "B01", "孫小毛".decode("utf8"))
conn.commit()
```