

Python Programming Database



권기웅

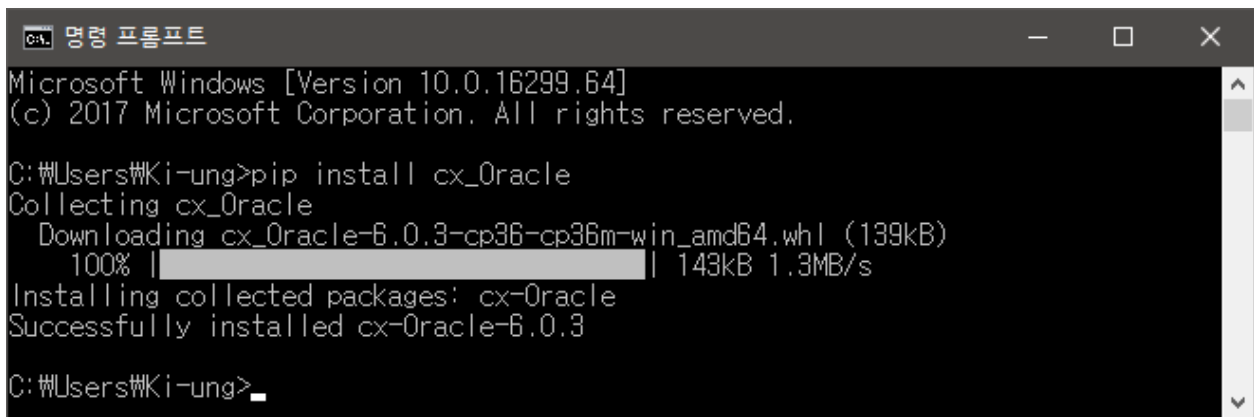


1. Oracle

1.1 모듈 설치

1.1.1 모듈 설치

명령 프롬프트에서 `pip install cx_Oracle`



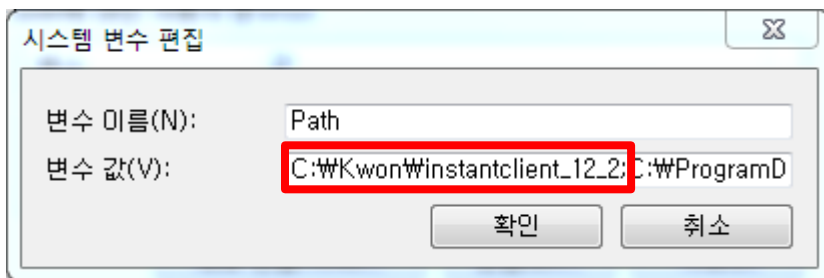
```
C:\> 명령 프롬프트
Microsoft Windows [Version 10.0.16299.64]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\Ki-ung>pip install cx_Oracle
Collecting cx_Oracle
  Downloading cx_Oracle-6.0.3-cp36-cp36m-win_amd64.whl (139kB)
    100% |#####| 143kB 1.3MB/s
Installing collected packages: cx-Oracle
Successfully installed cx-Oracle-6.0.3

C:\Users\Ki-ung>_
```

1.1.2 PATH 설정

Oracle instant client 의 경로를 PATH 에 등록



1.2 CRUD

1.2.1 INSERT

```
Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
Python 3.6.3 (v3.6.3:2c5fed8, Oct 3 2017, 18:11:49) [MSC v.1900 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Kwon\workspace\oracleTest.py =====
과자이름 : 치토스
과자가격 : 900
유통기한(YYYYMMDD) : 20171231
>>>

oracleTest.py - C:\Kwon\workspace\oracleTest.py (3.6.3)
File Edit Format Run Options Window Help
# -*- encoding:utf-8 -*-
import cx_Oracle
import os

os.environ["NLS_LANG"] = ".AL32UTF8"
con = cx_Oracle.connect('kwon/kwon@192.168.0.31:1521/xe')
cur = con.cursor()
snackName = input('과자이름 : ')
snackPrice = input('과자가격 : ')
snackExpDate = input('유통기한(YYYYMMDD) : ')
sql = "insert into snack values("
sql += "snack_seq.nextval, '%s', %s, to_date('%s', 'yyyymmdd'))" % (snackName, snackPrice, snackExpDate)
cur.execute(sql)
con.commit()
cur.close()
con.close()
```

1.2.2 SELECT

```
Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
Python 3.6.3 (v3.6.3:2c5fed8, Oct 3 2017, 18:11:49) [MSC v.1900 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Kwon\workspace\oracleTest.py =====
4) 새우깡 1000원 - 2018/1/1
6) 빼빼로 500원 - 2018/2/1
7) 초코파이 5000원 - 2018/3/1
8) 오메스 5500원 - 2018/2/11
>>>

oracleTest.py - C:\Kwon\workspace\oracleTest.py (3.6.3)
File Edit Format Run Options Window Help
# -*- encoding:utf-8 -*-
import cx_Oracle
import os

os.environ["NLS_LANG"] = ".AL32UTF8"
con = cx_Oracle.connect('kwon/kwon@192.168.0.31:1521/xe')
cur = con.cursor()
sql = "select * from snack"
cur.execute(sql)
for result in cur:
    snack = list(result)
    print('%d' %s %d원 - %d/%d/%d' % (snack[0], snack[1], snack[2], snack[3].year, snack[3].month, snack[3].day))
cur.close()
con.close()
```



2. MongoDB

2.1 모듈 설치

명령 프롬프트에서 `pip install pymongo`

```

C:\> 명령 프롬프트
Microsoft Windows [Version 10.0.16299.64]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\Ki-ung> pip install pymongo
Collecting pymongo
  Downloading pymongo-3.6.0-cp36-cp36m-win_amd64.whl (290kB)
    100% |#####| 296kB 1.4MB/s
Installing collected packages: pymongo
Successfully installed pymongo-3.6.0

C:\Users\Ki-ung>

```

2.2 CRUD

2.2.1 INSERT

```

Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
Python 3.6.3 (v3.6.3:2c5fed8, Oct 3 2017, 18:11:49) [MSC v.1900 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/workspacePython/mongodb.py =====
>>>
품명 : 무
가격 : 10000
무게 : 1
>>>

mongodb.py - D:/workspacePython/mongodb.py (3.6.3)
File Edit Format Run Options Window Help
import pymongo

con = pymongo.MongoClient('localhost') # db서버와 연결(pymongo.MongoClient('서버주소'))
db = con.nov29 # db 불러오기 (con.db명)
name = input('품명 : ')
price = int(input('가격 : '))
weight = int(input('무게 : '))
dic = {'품명':name, '가격':price, '무게':weight}
db.itemList2.insert(dic) # db에 넣기

```

2.2.2 SELECT

```

Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
Python 3.6.3 (v3.6.3:2c5fed8, Oct 3 2017, 18:11:49) [MSC v.1900 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/workspacePython/mongodb.py =====
>>>
고구마 29000 3
김치 39000 4
사과 50000 10
귤 40000 5
감자 50000 1
배 60000 5
무 10000 1
>>>

mongodb.py - D:/workspacePython/mongodb.py (3.6.3)
File Edit Format Run Options Window Help
import pymongo

con = pymongo.MongoClient('localhost')
db = con.nov29

data = db.itemList2.find() # 전체조회
# data = db.itemList2.find({'품명':'감자'}) # 품명이 감자인 데이터 조회
# data = db.itemList2.find({'가격':{'$gte':30000}}) # 가격이 30000이상인 데이터 조회
# data = db.itemList2.find({'품명':{'$regex':'감'}}) # 품명에 '감' 들어가는 데이터 조회

for d in data:
    print( d['품명'], d['가격'], d['무게'] )

```

