VTI Academy

WAY TO ENTERPRISE

Basic Programming

Lesson 09

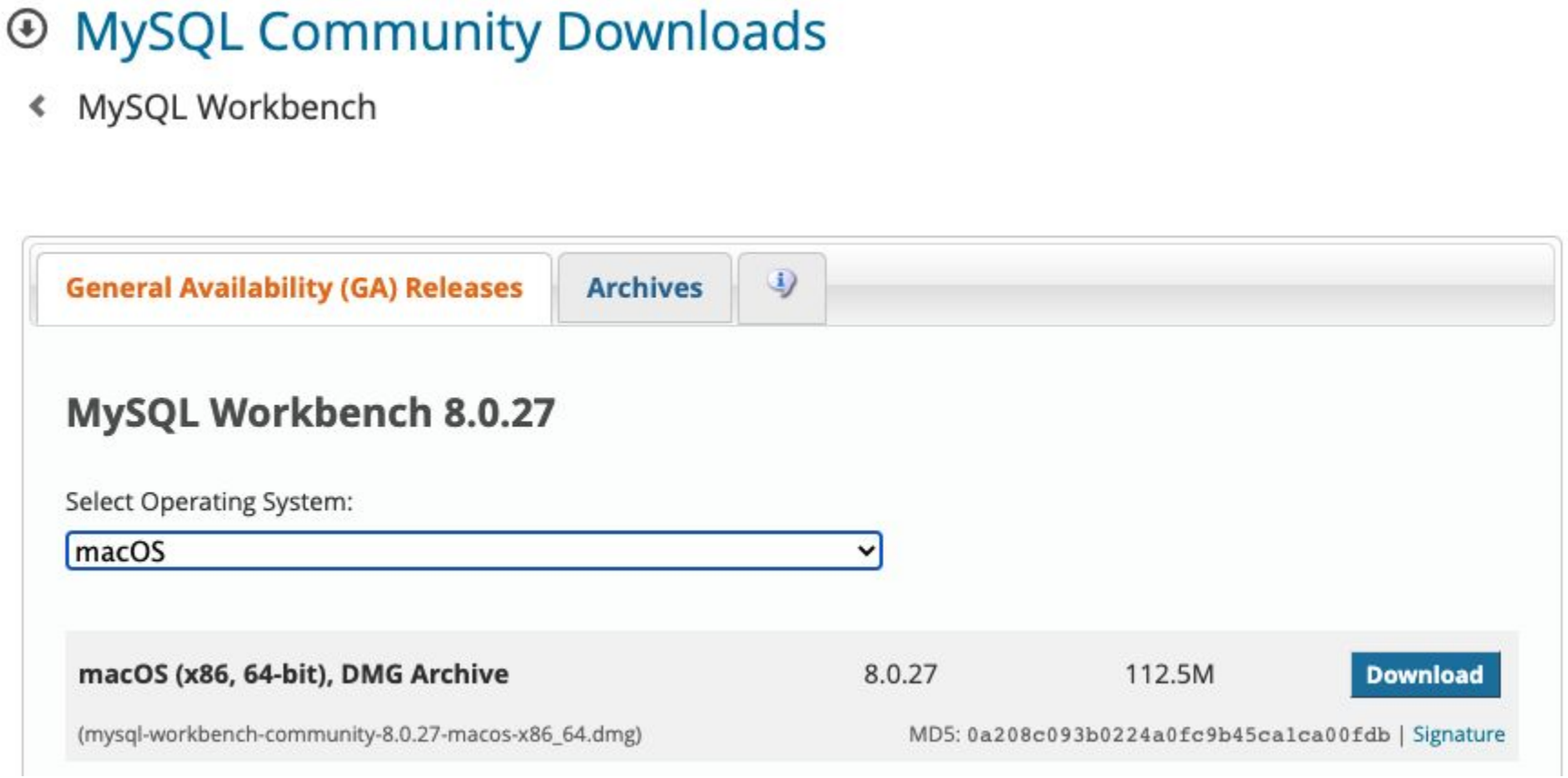
VTI Academy

Python with MySQL

Install MySQL Community Server

- Download: https://dev.mysql.com/downloads/mysql/

Install MySQL Workbench



- Download: https://dev.mysql.com/downloads/workbench/

Install mysql-connector-python library

Install via pip:

- pip install mysql-connector-python

Connect to MySQL

```
import mysql.connector

myconn = mysql.connector.connect(host="localhost",
                                 user="root",
                                 passwd="mysql123")
print('Connected to MySQL Database')

cur = myconn.cursor()
cur.execute("show databases")
for row in cur:
   print(row)

myconn.close()
```

Create new database

```
import mysql.connector

myconn = mysql.connector.connect(host="118.70.52.237",
                                 user="root",
                                 passwd="mysql123")
print('Connected to MySQL Database')

cur = myconn.cursor()
cur.execute("create database testdb")
cur.execute("show databases")
for row in cur:
   print(row)

myconn.close()
```

Create new table

```
cur.execute("""
   CREATE TABLE Employee(
        Code VARCHAR(10) PRIMARY KEY,
        Name VARCHAR(50) NOT NULL,
        Salary FLOAT NOT NULL,
        Department VARCHAR(100) NOT NULL
    )
""")
```

Insert a records

```
sql = """
    INSERT INTO Employee(Code, Name, Salary, Department)
    VALUES (%s, %s, %s, %s)
"""
vals = ("PY000007", 'Đỗ Duy Hiệu', 500, "Python 01")
cur.execute(sql, vals)
myconn.commit()
```

Insert multiple records

```
sql = ("""
   INSERT INTO Employee(Code, Name, Salary, Department)
   VALUES (%s, %s, %s, %s)
""")
vals = [
   ("PY000009", 'Dương', 700, "Python 01"),
   ("PY000014", 'Trần Hồng Vũ', 1000, "Python 01")
]
cur.executemany(sql, vals)
myconn.commit()
```

Select fetchall

```
cur.execute("SELECT * FROM Employee")
result = cur.fetchall()
for row in result:
    print(row)
```

Select where

```
cur.execute("SELECT * FROM Employee WHERE Name LIKE '%Hieu%'")
result = cur.fetchall()
for row in result:
    print(row)
```

Select fetchone

```
cur.execute("SELECT * FROM Employee")
result = cur.fetchone()
print(result)
```

Update

```
cur.execute("UPDATE Employee SET Salary = 600 WHERE Code = 'PY000007'")
myconn.commit()
```

Delete

```
cur.execute("DELETE FROM Employee WHERE Code = 'PY000007'")
myconn.commit()
```