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import pymysql

def select():
    conn, cur = None, None
    conn = pymysql.connect(host='localhost', user='root',
password='1234', db='encore', charset='utf8')
    cur = conn.cursor()
    sql = 'select * from departments'
    cur.execute(sql)
    for row in cur: #커서 객체에서 검색결과 한 줄씩 fetch
        print('dept_id:', row[0], ' / dept_name:', row[1], ' /
manager_id:', row[2], ' / location_id:', row[3])

    conn.close()

def insert():
    conn, cur = None, None
    conn = pymysql.connect(host='localhost', user='root',
password='1234', db='encore', charset='utf8')
    cur = conn.cursor()
    sql = 'insert into departments values(280, "dept test1", null,
1700)'
    cur.execute(sql)
    conn.commit()
    conn.close()

def update():
    conn, cur = None, None
    conn = pymysql.connect(host='localhost', user='root',
password='1234', db='encore', charset='utf8')
    cur = conn.cursor()
    sql = 'update departments set department_name="가나다라",
manager_id=100 where department_id=280'
    cur.execute(sql)
    conn.commit()
    conn.close()

def selectById(id):
    conn, cur = None, None
    conn = pymysql.connect(host='localhost', user='root',
password='1234', db='encore', charset='utf8')
    cur = conn.cursor()
    sql = 'select * from departments where department_id='+str(id)
    cur.execute(sql)
    row = cur.fetchone() #한줄 fetch.
    if row == None:
        print('없는 부서 번호')
    else:
        print('dept_id:', row[0], ' / dept_name:', row[1], ' /
manager_id:', row[2], ' / location_id:', row[3])
    conn.close()

def delete():
    conn, cur = None, None
    conn = pymysql.connect(host='localhost', user='root',
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password='1234', db='encore', charset='utf8')
    cur = conn.cursor()
    sql = 'delete from departments where department_id=280'
    cur.execute(sql)
    conn.commit()
    conn.close()

def main():
    #insert()
    #select()
    selectById(280)
    delete()
    selectById(280)

main()
```