



**CHARLES  
SEVERANCE**

Code Sample

emaildb.py

<https://www.py4e.com/code3.zip>

Chapter 15

**PYTHON  
FOR EVERYBODY**



/Applications/MAMP/htdocs/py4e/code3 — vi emaildb.py

```
import sqlite3

conn = sqlite3.connect('emaildb.sqlite')
cur = conn.cursor()

cur.execute('DROP TABLE IF EXISTS Counts')

cur.execute('''
CREATE TABLE Counts (email TEXT, count INTEGER)''')

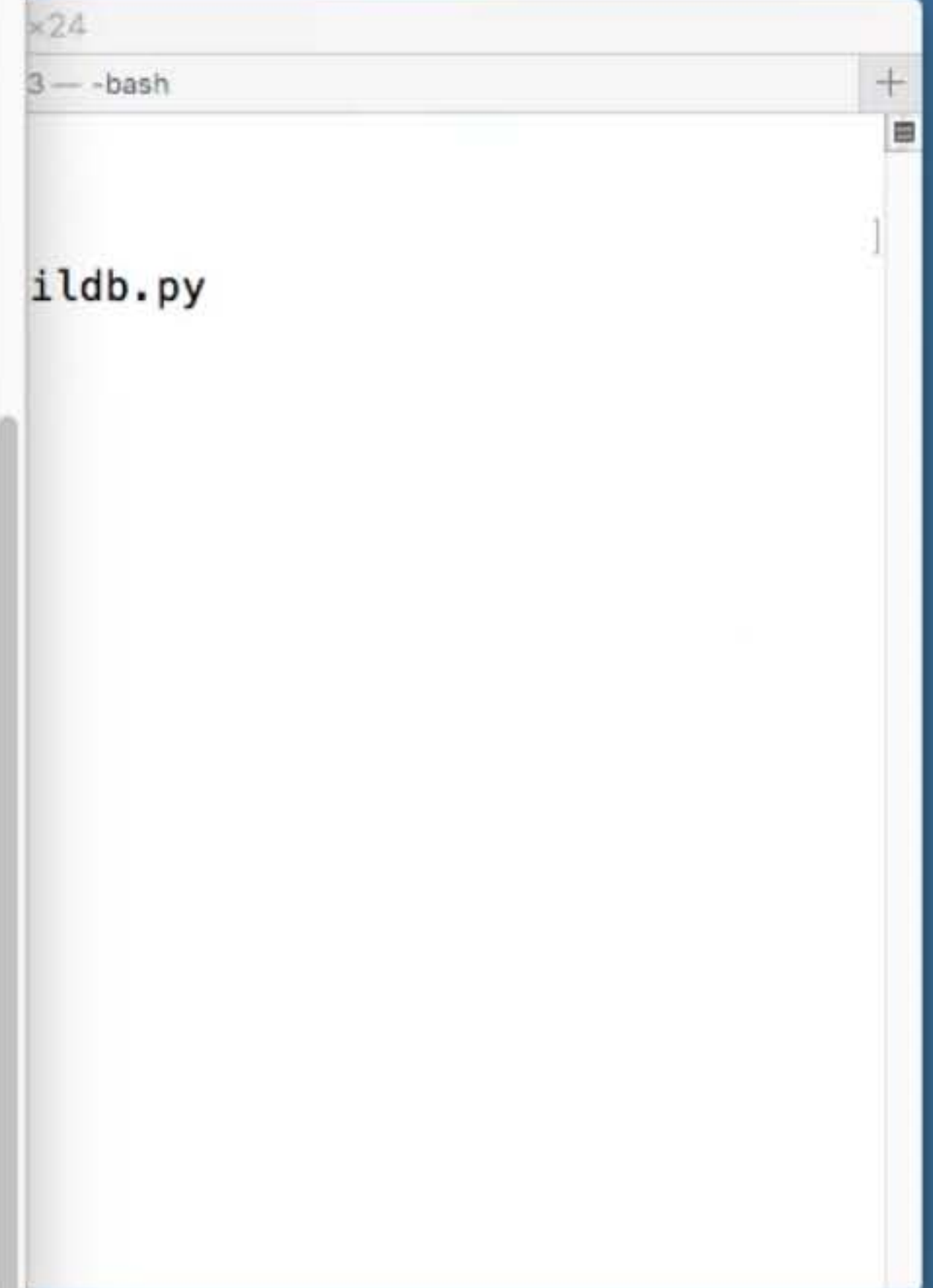
fname = input('Enter file name: ')
if (len(fname) < 1): fname = 'mbox-short.txt'
fh = open(fname)
for line in fh:
    if not line.startswith('From: '): continue
    pieces = line.split()
    email = pieces[1]
    cur.execute('SELECT count FROM Counts WHERE email = ? ', (email,))
    row = cur.fetchone()
    if row is None:
        cur.execute('INSERT INTO Counts (email, count)
VALUES (?, 1)', (email,))
    else:
        cur.execute('UPDATE Counts SET count = count + 1 WHERE email = ?',
(email,))
conn.commit()

# https://www.sqlite.org/lang_select.html
sqlstr = 'SELECT email, count FROM Counts ORDER BY count DESC LIMIT 10'

for row in cur.execute(sqlstr):
    print(str(row[0]), row[1])

"emaildb.py" 34L, 942C written
```

So let's take a look at





```
code3 — vi emaildb.py — 82x33
/Applications/MAMP/htdocs/py4e/code3 — vi emaildb.py

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cur.close()
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So we run all this stuff and then we close the connection and away we go. Okay?



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cur.close()
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```
Last login: Tue Oct 3 09:36:17 on ttys000
In .bash_profile
MacBook-Pro-7:code3 csev$ ls -l emaildb*
-rw-r--r--  1 csev  admin   947 Nov 18  2016 emaildb.py
MacBook-Pro-7:code3 csev$ python3 emaildb.py
Enter file name:
cwen@iupui.edu 5
zqian@umich.edu 4
david.horwitz@uct.ac.za 4
louis@media.berkeley.edu 3
gsilver@umich.edu 3
stephen.marquard@uct.ac.za 2
rjlowe@iupui.edu 2
wagnermr@iupui.edu 1
antranig@caret.cam.ac.uk 1
gopal.ramasammycook@gmail.com 1
MacBook-Pro-7:code3 csev$ ls -l emaildb*
-rw-r--r--  1 csev  admin   942 Oct 3 09:42 emaildb.py
-rw-r--r--  1 csev  admin  8192 Oct 3 09:53 emaildb.sqlite
MacBook-Pro-7:code3 csev$
```

we have a file emaildb.sqlite and we can run