

Task 1 Program Information (lab_insert.py)

This program allows you to insert multiple records of data from specific columns in a file into 'staff' table of 'firefly.sqlite' database. In just one go.

The syntax of command to run in terminal is:

```
>> python3 lab_insert.py FILENAME from_column:till_column
```

Where,

FILENAME is the name of the file which has bulk of data.

from_column is the column number you want to start including from (including this column).

till_column is the column number you want to include till (including this column).

**** You have to use the syntax from_column:till_column in order for the program to work. ****

Initially it is set as 1:3 because newcrew.csv has 4 columns and only columns 1 till 3 are required for the 'staff' table in the database. So if you don't pass any argument in command line, it will use 1:3 by default. Note that the starting and ending column numbers are both included.

This second argument is similar to slice function in python, but instead you are slicing the columns of data you want to insert. This feature can come handy if you have a data file of say 10 Columns, and the columns you want to insert into the table are somewhere in the middle. Note that, this program is restricted to insert 3 consecutive columns only.

Example:

I have a table within a database with 3 columns. And I want to Insert the following chunk of records from file 'mock_data.csv':

```
Race,Gender,First Name,Last Name,Occupation,Language,Email,Country
Salvadoran,Female,Evelyn,Bowman,VP Sales,Greek,ebowman0@wix.com,Argentina
South American,Male,Michael,Lee,Professor,Dari,mlee1@slideshare.net,Peru
Argentinian,Male,Philip,Brown,Biostatistician III,Dari,pbrown2@desdev.cn,Iran
Tohono O'odham,Female,Angela,Duncan,Programmer III,Dari,aduncan3@barnesandnoble.com,Albania
Yakama,Male,Carlos,Hall,VP Product Management,Quechua,chall4@lund1.de,Russia
Bolivian,Male,Clarence,Ward,Research Nurse,Hungarian,cward5@thetimes.co.uk,United States
Vietnamese,Female,Rose,Gardner,Environmental Specialist,Bengali,rgardner6@arstechnica.com,Indonesia
Alaska Native,Female,Annie,Lee,Senior Developer,English,alee7@lund1.de,China
Bolivian,Male,Chris,Morris,Cost Accountant,Khmer,cmorris8@oracle.com,Russia
Micronesian,Male,Todd,Brown,Nuclear Power Engineer,Tsonga,tbrown9@purevolume.com,China
Argentinian,Female,Linda,Chapman,Financial Analyst,Kannada,lchapmana@yelp.com,China
Lumbee,Female,Evelyn,Simpson,Marketing Manager,Pashto,esimpsonb@ftc.gov,Sweden
Sioux,Male,Bruce,Mcdonald,Software Test Engineer III,Armenian,bmcdonaldc@comcast.net,Finland
Asian,Female,Anna,Diaz,Assistant Manager,Latvian,adiazd@wordpress.org,Nicaragua
```

I am interested in inserting the following columns only; First Name, Last Name, Occupation. Their column numbers are 3, 4 and 5, The correct command to execute the program will be:

```
codio@cliff-middle:~/workspace$ python3 lab_insert.py mock_data.csv 3:5
Data from choosen file has succesfully been inserted into 'firefly.sqlite' database.
codio@cliff-middle:~/workspace$ █
```

If incorrect or ill-logical commands are entered, respective error messages will be displayed.

Common errors include incorrect typing of column numbers.