test

September 17, 2019

```
In [2]: %load_ext sql
In [3]: %sql postgresql://student:student@127.0.0.1/sparkifydb
Out[3]: 'Connected: student@sparkifydb'
In [4]: %sql SELECT * FROM songplays LIMIT 5;
* postgresql://student:***@127.0.0.1/sparkifydb
1 rows affected.
Out[4]: [(483, '1542837407796', 15, 'paid', 'AR5KOSW1187FB35FF4', 'SOZCTXZ12AB0182364', 818, 'Ch
In [4]: %sql SELECT * FROM users limit 5;
* postgresql://student:***@127.0.0.1/sparkifydb
5 rows affected.
Out[4]: [(95, 'Sara', 'Johnson', 'F', 'paid'),
         (95, 'Sara', 'Johnson', 'F', 'paid')]
In [6]: %sql SELECT * FROM users where first_name='Lily'
 * postgresql://student:***@127.0.0.1/sparkifydb
521 rows affected.
Out[6]: [(59, 'Lily', 'Cooper', 'F', 'free'),
         (59, 'Lily', 'Cooper', 'F', 'free'),
         (15, 'Lily', 'Koch', 'F', 'paid'),
         (15, 'Lily', 'Koch', 'F', 'paid'),
```

```
(15, 'Lily', 'Koch', 'F', 'paid'),
(32, 'Lily', 'Burns', 'F', 'free'),
(15, 'Lily', 'Koch', 'F', 'paid'),
(32, 'Lily', 'Burns', 'F', 'free'),
(15, 'Lily', 'Koch', 'F', 'paid'),
```

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(15, 'Lily', 'Koch', 'F', 'paid'),
```

```
(15, 'Lily', 'Koch', 'F', 'paid'),
(32, 'Lily', 'Burns', 'F', 'free'),
(15, 'Lily', 'Koch', 'F', 'paid'),
```

```
(15, 'Lily', 'Koch', 'F', 'paid'),
```

```
(15, 'Lily', 'Koch', 'F', 'paid'),
(32, 'Lily', 'Burns', 'F', 'free'),
(32, 'Lily', 'Burns', 'F', 'free'),
(15, 'Lily', 'Koch', 'F', 'paid'),
```

```
(15, 'Lily', 'Koch', 'F', 'paid'),
(32, 'Lily', 'Burns', 'F', 'free'),
(15, 'Lily', 'Koch', 'F', 'paid'),
(32, 'Lily', 'Burns', 'F', 'free'),
(15, 'Lily', 'Koch', 'F', 'paid'),
(15, 'Lily', 'Koch', 'F', 'paid'),
(32, 'Lily', 'Burns', 'F', 'free'),
(15, 'Lily', 'Koch', 'F', 'paid'),
```

```
(15, 'Lily', 'Koch', 'F', 'paid'),
(15, 'Lily', 'Koch', 'F', 'paid'),
(32, 'Lily', 'Burns', 'F', 'free'),
(32, 'Lily', 'Burns', 'F', 'free'),
(32, 'Lily', 'Burns', 'F', 'free'),
(15, 'Lily', 'Koch', 'F', 'paid'),
(15, 'Lily', 'Koch', 'F', 'free'),
(15, 'Lily', 'Koch', 'F', 'paid'),
```

```
(15, 'Lily', 'Koch', 'F', 'paid'),
```

```
(15, 'Lily', 'Koch', 'F', 'paid'),
```

```
(15, 'Lily', 'Koch', 'F', 'paid'),
(32, 'Lily', 'Burns', 'F', 'free'),
(15, 'Lily', 'Koch', 'F', 'paid'),
```

```
(15, 'Lily', 'Koch', 'F', 'paid'),
         (32, 'Lily', 'Burns', 'F',
                                    'free'),
         (32, 'Lily', 'Burns', 'F', 'free'),
         (32, 'Lily', 'Burns', 'F', 'free'),
         (32, 'Lily', 'Burns', 'F', 'free'),
         (32, 'Lily', 'Burns', 'F', 'free'),
         (32, 'Lily', 'Burns', 'F', 'free')]
In [1]: %sql SELECT * FROM songs LIMIT 10;
UsageError: Line magic function `%sql` not found.
In [11]: %sql SELECT * FROM songs where title='Setanta matins'
 * postgresql://student:***@127.0.0.1/sparkifydb
1 rows affected.
Out[11]: [('SOZCTXZ12AB0182364', 'Setanta matins', 'AR5KOSW1187FB35FF4', 0, Decimal('269.58322')
In [5]: %sql SELECT * FROM artists where artist_id='AR5KOSW1187FB35FF4'
```

```
1 rows affected.
Out[5]: [('AR5KOSW1187FB35FF4', 'Elena', 'Dubai UAE', Decimal('49.80388'), Decimal('15.47491'))]
In [4]: %sql SELECT * FROM artist LIMIT 5;
* postgresql://student:***@127.0.0.1/sparkifydb
5 rows affected.
Out[4]: [('ARD7TVE1187B99BFB1', 'Casual', 'California - LA', Decimal('NaN'), Decimal('NaN')),
         ('ARGSJW91187B9B1D6B', 'JennyAnyKind', 'North Carolina', Decimal('35.21962'), Decimal('
         ('ARKRRTF1187B9984DA', 'Sonora Santanera', '', Decimal('NaN'), Decimal('NaN')),
         ('ARKFYS91187B98E58F', 'Jeff And Sheri Easter', '', Decimal('NaN'), Decimal('NaN')),
         ('ARNTLGG11E2835DDB9', 'Clp', '', Decimal('NaN'), Decimal('NaN'))]
In [9]: %sql SELECT * FROM time LIMIT 5;
* postgresql://student:***@127.0.0.1/sparkifydb
5 rows affected.
Out[9]: [('00:03:22.796', 0, '14', 46, 11, 2018, '2'),
         ('00:06:08.796', 0, '14', 46, 11, 2018, '2'),
         ('00:11:06.796', 0, '14', 46, 11, 2018, '2'),
         ('00:17:37.796', 0, '14', 46, 11, 2018, '2'),
         ('00:20:25.796', 0, '14', 46, 11, 2018, '2')]
0.1 REMEMBER: Restart this notebook to close connection to sparkifydb
```

* postgresql://student:***@127.0.0.1/sparkifydb

Each time you run the cells above, remember to restart this notebook to close the connection to your database. Otherwise, you won't be able to run your code in create_tables.py, etl.py, or etl.ipynb files since you can't make multiple connections to the same database (in this case, sparkifydb).

```
In [10]: %sql SELECT artist.artist_id, songs.song_id FROM artist JOIN songs ON artist.artist_id
* postgresql://student:***@127.0.0.1/sparkifydb
146 rows affected.
Out[10]: [('ARD7TVE1187B99BFB1', 'SOMZWCG12A8C13C480'),
          ('ARD7TVE1187B99BFB1', 'SOMZWCG12A8C13C480'),
          ('ARD7TVE1187B99BFB1', 'SOMZWCG12A8C13C480'),
          ('ARGSJW91187B9B1D6B', 'SOQHXMF12AB0182363'),
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```

In []: