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Importing data from a MySQL database into a Pandas data frame including column names [duplicate]

Asked 3 years, 3 months ago Active 23 days ago Viewed 49k times



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I am importing data from a MySQL database into a Pandas data frame. The following excerpt is the code that I am using:



```
import mysql.connector as sql
import pandas as pd

db_connection = sql.connect(host='hostname', database='db_name', user='username', password=
db_cursor = db_connection.cursor()
db_cursor.execute('SELECT * FROM table_name')

table_rows = db_cursor.fetchall()

df = pd.DataFrame(table_rows)
```

When I print the data frame it does properly represent the data but my question is, is it possible to also keep the column names? Here is an example output:

```
0 1 2 3 4 5 6 7 8

0 :ID[giA0CqQcx+(9kbuSKV== NaN NaN None None None None None None None
1 lXB+jIS) DN!CXmj>0 (P8^]== NaN NaN None None None None None None
2 lXB+jIS) DN!CXmj>0 (P8^]== NaN NaN None None None None None None
3 lXB+jIS) DN!CXmj>0 (P8^]== NaN NaN None None None None None None
4 lXB+jIS) DN!CXmj>0 (P8^]== NaN NaN None None None None None None
```

What I would like to do is keep the column name, which would replace the pandas column indexes. For example, instead of having 0, the column name would be: "First_column" as in the MySQL table. Is there a good way to go about this? or is there a more efficient approach of importing data from MySQL into a Pandas data frame than mine?

python mysql sql pandas numpy

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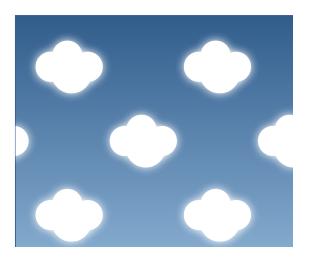
marked as duplicate by Bhargav Rao ♦ • python Jun 9 '16 at 20:32

This question has been asked before and already has an answer. If those answers do not fully address your question, please ask a new question.

why don't you use pd.read sql()? - MaxU Jun 9 '16 at 15:31

- The question here is related to MySQL db and not SQLalchemy as asked in the duplicate. pd.read_sql() does not support mysql connection. This question should not be marked as a duplicate. To answer the query: df = pd.DataFrame(table_rows, columns=db_cursor.column_names) will do what is asked. kneewarp Apr 8 '18 at 10:15 /
- 1 @kneewarp you should post this as an answer. The accepted answer will not work with a MySQL connection, which the OP requested. kainC Jul 21 '18 at 21:45

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IMO it would be much more efficient to use pandas for reading data from your MySQL server:





from sqlalchemy import create_engine
import pymysql

db_connection_str = 'mysql+pymysql://mysql_user:mysql_password@mysql_host/mysql_db'
db connection = create engine(db connection str)

```
df = pd.read_sql('SELECT * FROM table_name', con=db_connection)
```

this should also take care of column names...

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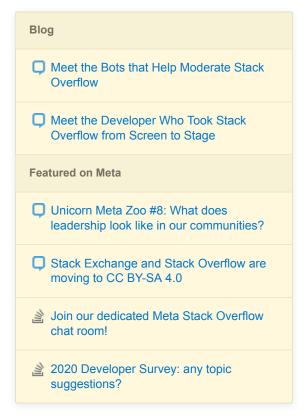
edited Aug 28 at 10:35

answered Jun 9 '16 at 15:32



In my case this worked, but couldn't query the table directly anymore until I closed the connection:

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