<https://predictivehacks.com/how-to-get-data-from-snowflake-using-python/>

## \*\*\* Get Data as Pandas Data Frame using the sqlalchemy:\*\*\*

We will need to create a connection engine and then run the SQL query. Notice that the account id (account), is what you see in the URL up to .snowflakecomputing.com

url = URL(

user='XXX',

password='XXX',

account='<ACCOUNT\_ID>',

warehouse='TEST\_WH',

database='GPIPIS\_DB',

schema='PUBLIC',

role = 'ACCOUNTADMIN'

)

engine = create\_engine(url)

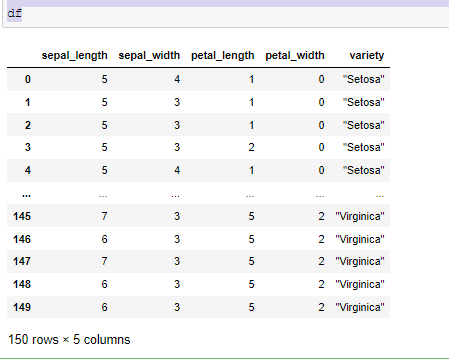
connection = engine.connect()

query = '''

select \* from myiristable

'''

df = pd.read\_sql(query, connection)



As we can see, we managed to load the snowflake table to our local environment.

## \*\*\* Get Data as Pandas Data Frame using the snowflake.connector and fetch\_pandas\_all \*\*\*

Provided that you have installed the snowflake-connector-python[pandas] you can load the data as follows.

conn = snowflake.connector.connect(

user='XXX',

password='XXX',

account='<ACCOUNT\_ID>',

warehouse='TEST\_WH',

database='GPIPIS\_DB',

schema='PUBLIC',

role = 'ACCOUNTADMIN'

)

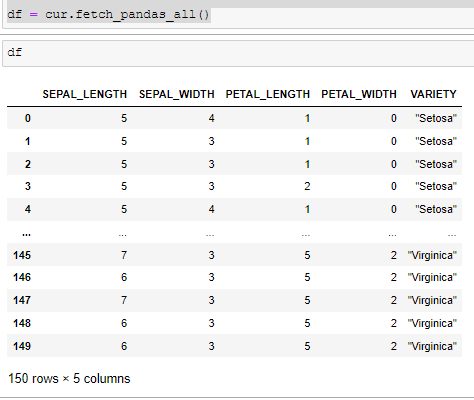
cur = conn.cursor()

sql = "select \* from myiristable"

cur.execute(sql)

df = cur.fetch\_pandas\_all()

df



Voilà, we loaded the snowflake table as a pandas data frame.

## \*\*\* Get Data as Pandas Data Frame using the snowflake.connector and from\_records \*\*\*

Alternatively, we can iterate over the cur object as follows.

conn = snowflake.connector.connect(

user='XXX',

password='XXX',

account='<ACCOUNT\_ID>',

warehouse='TEST\_WH',

database='GPIPIS\_DB',

schema='PUBLIC',

role = 'ACCOUNTADMIN'

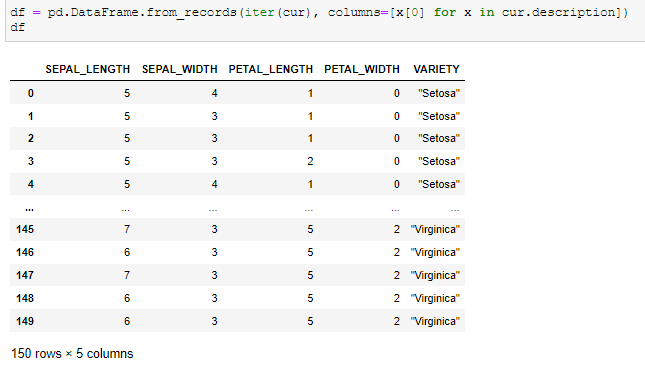
)

cur = conn.cursor()

sql = "select \* from myiristable"

cur.execute(sql)

df = pd.DataFrame.from\_records(iter(cur), columns=[x[0] for x in cur.description])



## \*\*\* Get the Data by Iterating the Cursor \*\*\*

Finally, we can get the data by iterating the cursor as follows.

conn = snowflake.connector.connect(

user='XXX',

password='XXX',

account='<ACCOUNT\_ID>',

warehouse='TEST\_WH',

database='GPIPIS\_DB',

schema='PUBLIC',

role = 'ACCOUNTADMIN'

)

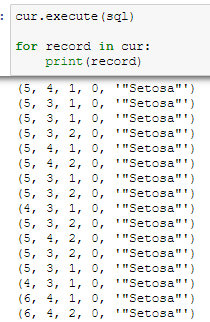
cur = conn.cursor()

sql = "select \* from myiristable"

cur.execute(sql)

for record in cur:

print(record)



## **Close the Connections**

Once we are done, we can close the connections.

|  |  |
| --- | --- |
| 1  2  3 | conn.close()  connection.close()  cur.close() |

=#=#=#

python

import snowflake.connector

# Establish a connection to Snowflake

conn = snowflake.connector.connect(

user='your\_username',

password='your\_password',

account='your\_account\_url',

warehouse='your\_warehouse',

database='your\_database',

schema='your\_schema'

)

# Create a cursor object

cursor = conn.cursor()

# Execute a SQL query

query = 'SELECT \* FROM your\_table'

cursor.execute(query)

# Fetch and process the results

results = cursor.fetchall()

for row in results:

# Process each row of data

print(row)

# Close the cursor and the connection

cursor.close()

conn.close()