### In [6]:

```
conda install cx_oracle
```

Collecting package metadata (current\_repodata.json): ...working... done Solving environment: ...working... done

## Package Plan ##

environment location: C:\Users\AnilKumar\anaconda3

added / updated specs:

- cx\_oracle

The following packages will be downloaded:

package	build	
conda-4.11.0 cx_oracle-8.3.0	py39haa95532_0   py39h8cc25b3_0	14.4 MB 192 KB
	Total:	14.6 MB

The following NEW packages will be INSTALLED:

```
cx_oracle pkgs/main/win-64::cx_oracle-8.3.0-py39h8cc25b3_0
```

The following packages will be UPDATED:

```
conda 4.10.3-py39haa95532_0 --> 4.11.0-py39h aa95532_0
```

Downloading and Extracting Packages

Note: you may need to restart the kernel to use updated packages.

conda-4.11.0	14.4 MB		0%
conda-4.11.0	14.4 MB		0%
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conda-4.11.0	14.4 MB	##	21%
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conda-4.11.0	14.4 MB	###4	34%
conda-4.11.0	14.4 MB	###8	39%
conda-4.11.0	14.4 MB	####3	43%
conda-4.11.0	14.4 MB	####8	48%
conda-4.11.0	14.4 MB	#####2	53%
conda-4.11.0	14.4 MB	#####7	57%
conda-4.11.0	14.4 MB	#####1	62%
conda-4.11.0	14.4 MB	#####5	66%
conda-4.11.0	14.4 MB	#####9	70%
conda-4.11.0	14.4 MB	######3	74%

```
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cx_oracle-8.3.0
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cx_oracle-8.3.0
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cx_oracle-8.3.0
                     192 KB
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                                               100%
cx_oracle-8.3.0
                    | 192 KB
                                 | ######## | 100%
Preparing transaction: ...working... done
Verifying transaction: ...working... done
Executing transaction: ...working... done
```

## In [8]:

```
conda install cx_oracle
```

```
Collecting package metadata (current_repodata.json): ...working... done Solving environment: ...working... done
```

# All requested packages already installed.

Note: you may need to restart the kernel to use updated packages.

### In [10]:

```
import cx_oracle
conn=cx_oracle.connection('anildb@//localhost:1521/xe')
```

ModuleNotFoundError: No module named 'cx\_oracle'

### In [48]:

```
import cx_Oracle
def getconnection():
    connection=cx_Oracle.connect('anildb/root2/localhost:1521/xe')
    return connection

def fetchdata():
    connection = getconnection()
    cursor = connection.cursor()
    sql_fetch_date = "select * from kpi_stg_channel"
    cursor.execute(sql_fetch_date)
    for result in cursor :
        print(result)
    connection.commit()
    cursor.close()
```

### In [40]:

```
#import module
import cx_Oracle
#create a table in oracle data base
try:
   con =cx_Oracle.connect('anildb/root@//localhost:1521/xe')
   print(con.version)
# now execute sql query
   cursor = con.cursor()
# creating a table employee
   cursor.execute("create table employee(empid integer primary key,name varchar2(20),salar
   print("table created successfully")
except cx Oracle.DatabaseError as e:
   print("there is a problem with Oracle", e)
# by writing finally if any error occurs
# then also we can close the all database operation
finally:
   if cursor:
        cursor.close()
   if con:
        con.close()
```

# 11.2.0.2.0 table created successfully

### In [59]:

```
import cx_Oracle
try:
    con = cx_Oracle.connect('anildb/root@//localhost:1521/xe')
    cursor = con.cursor()
    cursor.execute('insert into employee values(10001,\'Rahul\',50000.50)')
    con.commit()
    print('Record inserted successfully')
except cx_Oracle.DatabaseError as e:
    print("There is a problem with Oracle", e)
finally:
    if cursor:
        cursor.close()
    if con:
        con.close()
```

Record inserted successfully

# In [65]:

```
import cx_Oracle
    con = cx_Oracle.connect('anildb/root@//localhost:1521/xe')
except cx_Oracle.DatabaseError as e:
    print("there is an error with Oracle data base",e)
else:
    try:
        cur : con.cursor()
        data =[[10007,'vikram',48000],[10008,'Sunil',65000.1],[10009,'sameer',75000.0]]
        cur = con.cursor()
#Inserting multiple records into employee table
        cur.executemany('insert into employee values(:1,:2,:3)',data)
    except cx_Oracle.DatabaseError as e:
        print("there is an error with an Oracle",e)
    except Exception as e:
        print(e)
    else:
        con.commit()
        print('multiple records are inserted successfully')
finally:
    if cur:
            cur.close()
if con:
            con.close()
```

multiple records are inserted succesfully

### In [68]:

```
import cx Oracle
try:
    con = cx_Oracle.connect('anildb/root@//localhost:1521/xe')
    print(con.version)
except cx_Oracle.DatabaseError as e:
    print("This is the problem with Oracle",e)
else:
    try:
        cur = con.cursor()
#fetchall() is used to fetch all records from result set.
        cur.execute('select * from employee')
        rows = cur.fetchall()
        print(rows)
#fetchmany(int) is used to fetch limited number of records from result set based on intege
        cur.execute('select * from employee')
        rows = cur.fetchmany(3)
        print(rows)
#fetchone() is used fetch one record from top of the result set
        cur.execute('select * from employee')
        rows = cur.fetchone()
        print(rows)
    except cx_Oracle.DatabaseError as e:
        print("there is an error with Oracle data base : ",e)
    except Exception as e:
        print('Error:'+str(e))
finally:
    if cur:
        cur.close()
    if con:
        con.close()
```

```
11.2.0.2.0
[(10001, 'Rahul', 50000.5), (10007, 'vikram', 48000.0), (10008, 'Sunil', 650 00.1), (10009, 'sameer', 75000.0)]
[(10001, 'Rahul', 50000.5), (10007, 'vikram', 48000.0), (10008, 'Sunil', 650 00.1)]
(10001, 'Rahul', 50000.5)
```

### In [69]:

```
import cx_Oracle
try:
    con=cx_Oracle.connect('anildb/root@//localhost:1521/xe')
except cx_Oracle.DatabaseError as e:
    print('There is an error in Oracle database :',e)
else:
    try:
        cur = con.cursor()
        cur.execute('select * from employee where salary > :sal',{'sal' : 60000})
        rows = cur.fetchall()
        print(rows)
    except Exception as e :
        print('Error :',e)
finally:
    if cur:
        cur.close()
    if con:
        con.close()
```

[(10008, 'Sunil', 65000.1), (10009, 'sameer', 75000.0)]

# In [ ]: