Install Dependencies

```
pip3 install sqlalchemy
pip3 install psycopg2-binary
pip3 install pandas
```

Connect with PostgreSQL

```python
from sqlalchemy import create_engine
from sqlalchemy.ext.declarative import declarative_base
from sqlalchemy.orm import sessionmaker
from sqlalchemy import MetaData
import pandas as pd

db_host = "localhost"
db_name = "your_db_name"
db_pass = "your_db_password"
db_user = "your_db_user"

engine = create_engine(f"postgresql://{db_user}:{db_pass}@{db_host}/{db_name}")
Base = declarative_base()
metadata = MetaData(engine)

Session = sessionmaker(bind=engine)
session = Session()
```

Create User Model

```python
from sqlalchemy import Column, BigInteger, String

class User(Base):
    __tablename__ = "users"
    __table_args__ = {'extend_existing': True}
    id = Column(BigInteger, primary_key=True)
    name = Column(String, nullable=False)
    address = Column(String, nullable=False)
    mobile = Column(BigInteger, nullable=False)
    gender = Column(String, nullable=False)
```

Create table

```
Base.metadata.create_all(engine)
```

Insert Data

```python
import random as r

def generate_number():
    numbers = []
    for i in range(0,10):
        numbers.append(str(r.randint(0, 9)))
    return int("".join(numbers))



def insert_users():
    users = []
    for i in range(1,100):
        user = User()
        user.id = r.randint(0,100000)
        user.name = f"User {i}"
        user.address = f"Address {i}"
        user.mobile = generate_number()
        user.gender = "MALE" if i%2==0 else "FEMALE"
        users.append(user)
    session.add_all(users)
    session.commit()
insert_users()
```

Load SQL-Rows in Pandas DataFrame

```python
users_df = pd.read_sql('select * from users', con=engine)
users_df
```

Out[29]:

	id	name	address	mobile	gender
0	1	User 1	Address 1	419258673	FEMALE
1	2	User 2	Address 2	4559861054	MALE
2	3	User 3	Address 3	8063386964	FEMALE
3	4	User 4	Address 4	1336569558	MALE
4	5	User 5	Address 5	9839027096	FEMALE
...	...	...	...	...	...
391	57290	User 95	Address 95	9118740353	FEMALE
392	41394	User 96	Address 96	3062833592	MALE
393	14563	User 97	Address 97	4447742547	FEMALE
394	13330	User 98	Address 98	9789969224	MALE
395	16757	User 99	Address 99	6020208300	FEMALE