

In [2]:

```
from sqlalchemy import create_engine, Column, Integer, String
from sqlalchemy.orm import sessionmaker
from sqlalchemy.ext.declarative import declarative_base
```

In [3]:

```
engine = create_engine('mssql+pyodbc://@IN3457604W1\\SQLEXPRESS/db1?trusted_connection=yes
&driver=ODBC+Driver+17+for+SQL+Server', echo=True)
```

In [4]:

```
Base = declarative_base()

# Define the User model
class User(Base):
    __tablename__ = 'users'

    id = Column(Integer, primary_key=True)
    name = Column(String)
    email = Column(String)
```

C:\Users\PY421JS\AppData\Local\Temp\ipykernel\_23864\259522383.py:1: MovedIn20Warning: The ``declarative\_base()`` function is now available as sqlalchemy.orm.declarative\_base(). (deprecated since: 2.0) (Background on SQLAlchemy 2.0 at: <https://sqlalche.me/e/b8d9>)

```
Base = declarative_base()
```

In [6]:

```
Base.metadata.create_all(engine)

# Create a new session
Session = sessionmaker(bind=engine)
session = Session()
```

```
2024-01-17 11:01:22,711 INFO sqlalchemy.engine.Engine SELECT CAST(SERVERPROPERTY('Product
Version') AS VARCHAR)
2024-01-17 11:01:22,711 INFO sqlalchemy.engine.Engine [raw sql] ()
2024-01-17 11:01:22,711 INFO sqlalchemy.engine.Engine SELECT schema_name()
2024-01-17 11:01:22,711 INFO sqlalchemy.engine.Engine [generated in 0.00099s] ()
2024-01-17 11:01:22,737 INFO sqlalchemy.engine.Engine SELECT CAST('test max support' AS N
VARCHAR(max))
2024-01-17 11:01:22,737 INFO sqlalchemy.engine.Engine [generated in 0.00098s] ()
2024-01-17 11:01:22,737 INFO sqlalchemy.engine.Engine SELECT 1 FROM fn_listextendedproper
ty(default, default, default, default, default, default, default)
2024-01-17 11:01:22,749 INFO sqlalchemy.engine.Engine [generated in 0.00220s] ()
2024-01-17 11:01:22,802 INFO sqlalchemy.engine.Engine BEGIN (implicit)
2024-01-17 11:01:22,806 INFO sqlalchemy.engine.Engine SELECT [INFORMATION_SCHEMA].[TABLES
].[TABLE_NAME]
FROM [INFORMATION_SCHEMA].[TABLES]
WHERE ([INFORMATION_SCHEMA].[TABLES].[TABLE_TYPE] = CAST(? AS NVARCHAR(max))) OR [INFORMAT
ION_SCHEMA].[TABLES].[TABLE_TYPE] = CAST(? AS NVARCHAR(max))) AND [INFORMATION_SCHEMA].[T
ABLES].[TABLE_NAME] = CAST(? AS NVARCHAR(max)) AND [INFORMATION_SCHEMA].[TABLES].[TABLE_S
HEMA] = CAST(? AS NVARCHAR(max))
2024-01-17 11:01:22,807 INFO sqlalchemy.engine.Engine [generated in 0.00103s] ('BASE TABL
E', 'VIEW', 'users', 'dbo')
2024-01-17 11:01:22,820 INFO sqlalchemy.engine.Engine COMMIT
```

In [10]:

```
# Query the user
user = session.query(User).filter(User.id==1)
for i in user:
    print(i.email)
```

```
2024-01-17 11:16:41,296 INFO sqlalchemy.engine.Engine SELECT users.id AS users_id, users.
name AS users_name, users.email AS users_email
FROM users
```

```
WHERE users.id = ?  
2024-01-17 11:16:41,297 INFO sqlalchemy.engine.Engine [generated in 0.00127s] (1,) dip@gmail
```

In [11]:

```
user.update({User.email: "dipangshumandal@gmail.com"})
```

```
2024-01-17 11:42:14,543 INFO sqlalchemy.engine.Engine UPDATE users SET email=? WHERE user  
s.id = ?  
2024-01-17 11:42:14,544 INFO sqlalchemy.engine.Engine [generated in 0.00121s] ('dipangshu  
mandal@gmail.com', 1)
```

Out[11]:

```
1
```

In [12]:

```
session.commit()
```

```
2024-01-17 11:42:22,568 INFO sqlalchemy.engine.Engine COMMIT
```

In [13]:

```
session.close()
```

In [ ]: