

SQLAlchemy

[Download Demo Code <../sqla-intro-demo.zip>](#)

Goals

Learn to use object-oriented techniques with relational DBs.

Without writing any SQL.

```
>>> whiskey = Pet(name='Whiskey', species="dog", hunger=50)

>>> whiskey.hunger
50

>>> whiskey.hunger = 20
```

SQLAlchemy Intro

SQLAlchemy ORM

- Popular, powerful, Python-based ORM (object-relational mapping)
- Translation service between OOP in our server language and relational data in our database
- Can use by itself, with Flask, or other web frameworks

Installing SQLAlchemy

Need the program that lets Python speak PostgreSQL: ***psycopg2***

Need the program that provides SQLAlchemy: ***flask-sqlalchemy***

```
$ pip install psycopg2-binary
$ pip install flask-sqlalchemy
```

OO into SQL

Model

A model like this:

demo/models.py