Solution 2: Cats and Dogs

TODO

- Create a new project. Run the sqlite3.exe tool.
- Write “initPets.sql” SQL script
- Create Pets.py
  - printCustomers()
  - oneDogNoCats()
  - oneTypeOfPet()
  - moreThanSixCats()
  - moreThanTenPets()

initPets.sql

```
DROP TABLE PETS;

CREATE TABLE PETS (
  name VARCHAR(20),
  cats INT,
  dogs INT
);

INSERT INTO PETS values('Jan',     17,0);
INSERT INTO PETS values('Stacy',    2,1);
INSERT INTO PETS values('Paul',     0,1);
INSERT INTO PETS values('Tim',      0,1);
INSERT INTO PETS values('Angelina', 4,0);
INSERT INTO PETS values('Dail',     6,6);
INSERT INTO PETS values('Robin',    0,3);
INSERT INTO PETS values('Bobby',    4,8);
INSERT INTO PETS values('Kim',      8,8);
INSERT INTO PETS values('Jacob',    2,0);
```

Pets.py

```
import sqlite3

def printCustomer(row):
    print(row[0]+" has "+str(row[1])+" cats and "+str(row[2])+" dogs.")

def printCustomers():
    conn = sqlite3.connect("pets.sqlite")
    try:
        c = conn.cursor()
        c.execute("select name, cats, dogs from pets")
        rows = c.fetchall()
        for r in rows:
            printCustomer(r)
    finally:
        conn.close()

def printBenjiWinners(): # 1 dog and 0 cats
    print("Benji Winners:")
    conn = sqlite3.connect("pets.sqlite")
    try:
        c = conn.cursor()
        c.execute("select name, cats, dogs from pets where dogs=1 and cats=0")
        rows = c.fetchall()
        for r in rows:
            printCustomer(r)
    finally:
        conn.close()
```

Pets.py

```
def printOneWayWinners(): # One type of pet
    print("One-Way Winners:")
    conn = sqlite3.connect("pets.sqlite")
    try:
        c = conn.cursor()
        c.execute("select name, cats, dogs from pets where (dogs=0 or cats=0) and (dogs>0 or cats>0)")
        rows = c.fetchall()
        for r in rows:
            printCustomer(r)
    finally:
        conn.close()

def printCatLadyWinners(): # More than 6 cats
    print("Cat-Lady Winners:")
    conn = sqlite3.connect("pets.sqlite")
    try:
        c = conn.cursor()
        c.execute("select name, cats, dogs from pets where cats>6")
        rows = c.fetchall()
        for r in rows:
            printCustomer(r)
    finally:
        conn.close()
```

Pets.py

```
def printZooKeeperWinners(): # More than 10 pets
    print("Zoo-Keeper Winners:")
    conn = sqlite3.connect("pets.sqlite")
    try:
        c = conn.cursor()
        c.execute("select name, cats, dogs from pets where (cats + dogs > 10)")
        rows = c.fetchall()
        for r in rows:
            printCustomer(r)
    finally:
        conn.close()
```