

Nolan McCarter

CSC 423 - Database Systems

12/8/2022

Project: Part 3

3).

Parts a and b are included in createDB.py SQL code submitted in the following GitHub repository:

<https://github.com/nolanmccarter/PawsomePets>

Clinic:

```
((base) Nolans-MBP-2:Embedded_SQL nolanmccarter$ python3 createDB.py
clinicNo      name      address telephoneNo staffNo
0      C001      Coral Gables 1234 Ponce De Leon Blvd 3054358934      S001
1      C002      Fort Lauderdale 523 Las Olas Blvd 7542369482      S002
2      C003      Hollywood 500 Jefferson Street 7542375632      S003
3      C004      Jacksonville 945 Main Street 9043782365      S004
4      C005      West Palm Beach 256 Clematis Street 5613678993      S005
Index(['clinicNo', 'name', 'address', 'telephoneNo', 'staffNo'], dtype='object')
(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$
```

Staff:

```
staffNo      name      address telephoneNo      DOB      position      salary clinicNo
0      S001      Michael Wright 435 Old Town Road 3053877743 1990-12-21      Manager      100000      C001
1      S002      Larry Herd 770 Sage Drive 7543781125 1992-03-09      Manager      100000      C002
2      S003      Rachel Gant 509 Summerhouse Drive 7543784323 1995-10-27      Manager      100000      C003
3      S004      Andrew Bell 3 Sugar Road 9047877723 1993-07-15      Manager      100000      C004
4      S005      Jackson Clark 557 North Holly Street 5611288983 1997-02-18      Manager      80000      C005
5      S006      Jane Doe 1000 Wood Cliff Lane 7542843211 1987-1-14      Vet      125000      C003
6      S007      Robert Small 921 South West Road 5614467822 1999-11-02      Technician      70000      C005
7      S008      Bella Anker Shady Meadow Street 7541244568 2001-03-31      Receptionist      45000      C002
8      S009      Frank Simon 289 Shore Ave 3054782745 1986-04-10      Janitor      35000      C001
9      S010      Jennifer Dixon 8932 Norfolk Drive 9049023364 1995-12-26      Assistant      60000      C004
10     S011      Noah Stevens 357 Oklahoma Street 3056298037 1997-02-18      Technician      70000      C001
11     S012      Carole Harrington 11 South Devon Ave 7547889657 1998-06-22      Technician      70000      C003
12     S013      Traci Reyes 758 Boston Rd 7545441537 2000-03-10      Technician      70000      C002
13     S014      Angelo Maldonado 68 Coffee Drive 9047200688 2000-05-20      Technician      70000      C004
Index(['staffNo', 'name', 'address', 'telephoneNo', 'DOB', 'position',
      'salary', 'clinicNo'],
      dtype='object')
(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$
```

PetOwner:

```
ownerNo      name      address      telephoneNo  clinicNo
0      0001    Angelica Brown      900 Canvas Street  5617865361      C005
1      0002      Barry White      2002 West Apple Road  9047433522      C004
2      0003      John Smith      3000 Sunrise Lane  7549184564      C003
3      0004    Johnny Williams  545 East Tangerine Road  7542936851      C002
4      0005      Adam Toyota  7155 South Overlook Ave  3057448916      C001
Index(['ownerNo', 'name', 'address', 'telephoneNo', 'clinicNo'], dtype='object')
(base) Nolan-MBP-2:Embedded_SQL nolanmccarter$
```

Pet:

```
(base) Nolan-MBP-2:Embedded_SQL nolanmccarter$ python3 createDB.py
petNo      name      DOB      species      breed      color  ownerNo  clinicNo
0      P001      Dunkin  2013-04-29      Dog      Bulldog      Gray      0004      C002
1      P002      Maggie  2016-12-03      Dog      Husky      White      0001      C005
2      P003      Leo      2010-09-16      Cat      Siamese      White      0003      C003
3      P004      Snuffles  2018-06-07      Dog      Golden Retriever  Golden      0005      C001
4      P005      Ginger  2014-08-12      Cat      Sphynx      Tan      0002      C004
5      P006      Baxter  2018-02-21      Dog      Lab      Black      0003      C003
6      P007      Ollie      2017-01-05      Dog      Husky      Gray      0004      C002
Index(['petNo', 'name', 'DOB', 'species', 'breed', 'color', 'ownerNo',
      'clinicNo'],
      dtype='object')
(base) Nolan-MBP-2:Embedded_SQL nolanmccarter$
```

Examination:

```
(base) Nolan-MBP-2:Embedded_SQL nolanmccarter$ python3 createDB.py
examNo  chiefComplaint      description      dateSeen      actionsTaken      staffNo  petNo
0      E001  Stomach issues      Gave the dog a piece of steak and he has been ...  2022-07-20      Gave anti-nausea medication and recommended a ...  S013  P001
1      E002  Ear infection      Skin around ear has turned red and signs of sw...  2022-08-01      Thoroughly cleaned ears and recommended a topi...  S007  P002
2      E003      Cancer      Large mass in mouth indicating oral cancer. Tr...  2022-09-29      Scheduled surgery to remove the oral tumor for...  S012  P003
3      E004  Allergies      Has been itching his belly and sneezing often.  2022-10-13      Gave injection and oral medications to take at...  S011  P004
4      E005      Pain      Pain in rear left leg, noticeable limp when wal...  2022-11-15      Minor sprain in rear left leg, gave anti-infla...  S014  P005
5      E006      Cancer      Surgery for oral tumor.  2022-11-15      Successfully removed tumor, gave medication an...  S012  P003
6      E007  Eye condition      Has been bumping into objects and is scared to...  2022-11-27      Gave eye drops and oral medications for owner ...  S012  P006
7      E008  Ligament tear      Struggles to bear weight on back left leg and ...  2022-12-04      Told owner to monitor his behavior and if cond...  S013  P007
Index(['examNo', 'chiefComplaint', 'description', 'dateSeen', 'actionsTaken',
      'staffNo', 'petNo'],
      dtype='object')
(base) Nolan-MBP-2:Embedded_SQL nolanmccarter$
```

c). Screenshots of the contents of the database created for each query as follows. Queries also included in their own separate python file, queries.py, in the repository.

```
# 1.
# List all staff numbers and names of those with the position 'Manager' as with their
corresponding clinic numbers and names.
query = """
    SELECT Staff.staffNo, Staff.name, Staff.position, Clinic.clinicNo, Clinic.name
    FROM Staff, Clinic
    WHERE Staff.position='Manager' AND Staff.staffNo=Clinic.staffNo
    ;
    """
cursor.execute(query)
```

```
[(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$ python3 createDB.py
  staffNo      name position clinicNo      name
0   S001 Michael Wright  Manager   C001   Coral Gables
1   S002   Larry Herd  Manager   C002  Fort Lauderdale
2   S003   Rachel Gant  Manager   C003   Hollywood
3   S004   Andrew Bell  Manager   C004   Jacksonville
4   S005  Jackson Clark  Manager   C005  West Palm Beach
Index(['staffNo', 'name', 'position', 'clinicNo', 'name'], dtype='object')
(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$
```

```
# 2.
# List the names and phone numbers of owners of pets with the breed 'Husky'.
query = """
    SELECT Pet.breed, PetOwner.name, PetOwner.telephoneNo
    FROM Pet, PetOwner
    WHERE Pet.breed='Husky' AND Pet.ownerNo=PetOwner.ownerNo
    ;
    """
cursor.execute(query)
```

```
[(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$ python3 createDB.py
  breed      name telephoneNo
0  Husky Angelica Brown  5617865361
1  Husky Johnny Williams  7542936851
Index(['breed', 'name', 'telephoneNo'], dtype='object')
(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$
```

```
# 3.
# List all staff that work in the Coral Gables clinic and have a salary greater than
$50,000.
query = """
    SELECT Clinic.name, Staff.staffNo, Staff.name, Staff.salary
    FROM Clinic, Staff
    WHERE Clinic.name='Coral Gables' AND Staff.salary > 50000
    ;
    """
cursor.execute(query)
```

```
[(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$ python3 createDB.py
      name staffNo      name salary
0  Coral Gables  S010  Jennifer Dixon  60000
1  Coral Gables  S007   Robert Small  70000
2  Coral Gables  S011   Noah Stevens  70000
3  Coral Gables  S012  Carole Harrington  70000
4  Coral Gables  S013   Traci Reyes  70000
5  Coral Gables  S014  Angelo Maldonado  70000
6  Coral Gables  S005   Jackson Clark  80000
7  Coral Gables  S001   Michael Wright 100000
8  Coral Gables  S002    Larry Herd 100000
9  Coral Gables  S003   Rachel Gant 100000
10 Coral Gables  S004   Andrew Bell 100000
11 Coral Gables  S006    Jane Doe 125000
Index(['name', 'staffNo', 'name', 'salary'], dtype='object')
(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$
```

```
# 3.
# List all staff that work in the Coral Gables clinic and have a salary greater than
$50,000.
query = """
    SELECT Clinic.name, Staff.staffNo, Staff.name, Staff.salary
    FROM Clinic, Staff
    WHERE Clinic.name='Coral Gables' AND Staff.salary > 50000 AND
Clinic.clinicNo=Staff.clinicNo
    ORDER BY Staff.salary ASC
    ;
    """
cursor.execute(query)
```

```
[(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$ python3 createDB.py
      name staffNo      name salary
0  Coral Gables  S011   Noah Stevens  70000
1  Coral Gables  S001  Michael Wright 100000
Index(['name', 'staffNo', 'name', 'salary'], dtype='object')
(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$
```

```
# 4.
# List all pets belonging to John Smith including their species, breed and color.
query = """
    SELECT PetOwner.name, Pet.species, Pet.breed, Pet.color
    FROM PetOwner, Pet
    WHERE PetOwner.name='John Smith' AND PetOwner.ownerNo=Pet.ownerNo
    ;
    """
cursor.execute(query)
```

```
[(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$ python3 createDB.py
      name species   breed  color
0  John Smith    Cat  Siamese  White
1  John Smith    Dog    Lab    Black
Index(['name', 'species', 'breed', 'color'], dtype='object')
(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$
```

```
# 5.
# List all the cats that underwent an examination on November 15, 2022.
query = """
    SELECT Examination.dateSeen, Pet.petNo, Pet.name
    FROM Pet, Examination
    WHERE Examination.dateSeen='2022-11-15' AND Examination.petNo=Pet.petNo AND
Pet.species='Cat'
    ORDER BY Pet.petNo ASC
    ;
    """
cursor.execute(query)
```

```
[(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$ python3 createDB.py
      dateSeen petNo   name
0  2022-11-15  P003    Leo
1  2022-11-15  P005  Ginger
Index(['dateSeen', 'petNo', 'name'], dtype='object')
(base) Nolans-MBP-2:Embedded_SQL nolanmccarter$
```