Assignment_week_10 & 11_Raghuwanshi_Prashant_DSC540

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Assignment: Week 10 & Week 11 Exercise, Storing Data and Final Project

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Course: DSC540-T301 Data Preparation (2221-1) Activity 11: Retrieving Data Correctly from Databases

[1]:
```
# Connect to petsdb database
import sqlite3
conn = sqlite3.connect("petsdb")
```

[2]:
```
# function to verify the connection
def is_opened(conn):
    try:
        conn.execute("select * from persons LIMIT 1")
        return True
    except sqllite3.ProgrammingError as e:
        print("connection closed {}".formate(e))
        return False
```

[3]:
```
# verifying  connection
print(is_opened(conn))
```

```
True
```

[4]:
```
# closing the connection
conn.close()
```

[5]:
```
# reconnicting to db with cursor
conn = sqlite3.connect('petsdb')
c= conn.cursor()
```

[6]:
```
# find out the different age gropus are in person database
for ppl, age in c.execute("select count(*), age from persons Group BY age"):
    print("we have {} peoples aged {}".format(ppl, age))
```

```
we have 2 peoples aged 5
we have 1 peoples aged 6
we have 1 peoples aged 7
we have 3 peoples aged 8
we have 1 peoples aged 9
we have 2 peoples aged 11
we have 3 peoples aged 12
we have 1 peoples aged 13
we have 4 peoples aged 14
we have 2 peoples aged 16
we have 2 peoples aged 17
we have 3 peoples aged 18
we have 1 peoples aged 19
we have 3 peoples aged 22
we have 2 peoples aged 23
we have 3 peoples aged 24
we have 2 peoples aged 25
we have 1 peoples aged 27
we have 1 peoples aged 30
we have 3 peoples aged 31
we have 1 peoples aged 32
we have 1 peoples aged 33
we have 2 peoples aged 34
we have 3 peoples aged 35
we have 3 peoples aged 36
we have 1 peoples aged 37
we have 2 peoples aged 39
we have 1 peoples aged 40
we have 1 peoples aged 42
we have 2 peoples aged 44
we have 2 peoples aged 48
we have 1 peoples aged 49
we have 1 peoples aged 50
we have 2 peoples aged 51
we have 2 peoples aged 52
we have 2 peoples aged 53
we have 2 peoples aged 54
we have 1 peoples aged 58
we have 1 peoples aged 59
we have 1 peoples aged 60
we have 1 peoples aged 61
we have 2 peoples aged 62
we have 1 peoples aged 63
we have 2 peoples aged 65
we have 2 peoples aged 66
we have 1 peoples aged 67
we have 3 peoples aged 68
we have 1 peoples aged 69
```

```
we have 1 peoples aged 70
we have 4 peoples aged 71
we have 1 peoples aged 72
we have 5 peoples aged 73
we have 3 peoples aged 74
```

[7]:
```
# find out which age gropus have highest number of person in database
for ppl, age in c.execute("select count(*), age from persons Group BY age ORDER␣
 ↪BY count(*) DESC"):
    print("Highest no of peoples is {} and belongs to aged group {}".
 ↪format(ppl, age))
    break
```

```
Highest no of peoples is 5 and belongs to aged group 73
```

[8]:
```
# find out how many peoples do not have full name
res = c.execute("select count(*) from persons where last_name is null")
for row in res:
    print(row)
```

```
(60,)
```

[9]:
```
# find out how many peoples have more than one pet
res = c.execute("select count(*) from (select count(owner_id) from pets GROUP␣
 ↪BY Owner_id HAVING count(owner_id)>1)")
for row in res:
    print(row)
```

```
(43,)
```

[10]:
```
# find out how many pets have recieved treatments, exedcute the following␣
 ↪commnad:
res = c.execute("select count(*) from pets where treatment_done =1")
for row in res:
    print(row)
```

```
(36,)
```

[11]:
```
# find out how many pets have recieved treatment and the type of pet is known
res = c.execute("select count(*) from pets where treatment_done =1 and pet_type␣
 ↪IS not null")
for row in res:
    print(row)
```

```
(16,)
```

[12]:
```
#find out how many pets are from the city called "east port"
res = c.execute("select count(*) from pets join persons on pets.owner_id =␣
 ↪persons.id where persons.city='east port'")
for row in res:
```

```
    print(row)
```

```
(49,)
```

[13]:
```
# find out howmany pets are from the city called east pert and who received␣
 ↪treatment
res = c.execute("select count(*) from pets join persons on pets.owner_id =␣
 ↪persons.id where persons.city='east port' and pets.treatment_done=1")
for row in res:
    print(row)
```

```
(11,)
```