

Documentation

Shared Key

Practice Problems

Discussion 11: Databases

SI 206: Data-Oriented Programming

Instructor: Dr. Barbara (Barb) Ericson

GSI: Kexuan (Michael) Huang

IA: Cristina & Jade

School of Information University of Michigan

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Documentation
Drop SQL
Shared Key
Practice Problen

Deadlines

HW6 due this Friday (11/17)

Before We Begin

- Make sure you've installed DB Browser for SQLite
- Working with SQL requires lots of tuples, in Python

```
tup_1 = ('item_1', ) # this is a tuple with one item
tup_1 = ('item_1') # this is NOT a tuple, instead it's a string
```

Documentation



Documentation

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As always, read the documentation.

- Documentation: https://www.sqlite.org/docs.html
- Good Tutorial: https://www.w3schools.com/sql/default.asp
- Useful things to read: SELECT, WHERE, JOIN, INSERT, EXISTS

Dron SQL

DROP Table



- DROP TABLE IF EXISTS <tablename> will completely wipe out your table. Be careful when deleting tables! Instead do:
- CREATE TABLE IF NOT EXISTS <tablename>: this will create a table if one
 doesn't exist, but will not overwrite an existing one.

Shared Keys between Tables



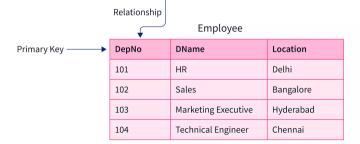
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Practice Problem

Department

EmpNo	EmpName	DepNo	← Foreign Key
1001	Sahil	101	
1004	Kavish	102	
1006	Aditya	103	
1005	Atul	104	



Practice Problems



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Go to Canvas \rightarrow Assignment \rightarrow Discussion 11 and clone the GitHub Repo: https://classroom.github.com/a/A28mR5IG

Task 1. Create the 'Patients' table



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Task 1

• Fill in create_patients_table(): Create a new table with following fields: pet_id (INTEGER), name (TEXT), species_id (INTEGER), age (INTEGER), cuteness (INTEGER), aggressiveness (INTEGER)

• Fill in add_sprinkles: Insert a row of following data to "Patients" table:

```
pet_id: 0, name: 'Sprinkles', species_id: 10, age: 2, cuteness: 99,
aggressiveness: 25
```

Task 2: Merge the hospitals



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Task 2

- Fill in add_pets_from_json(): Merge the patients info from the JSON file to your "Patients" table.
- Tips: You will need to query "Species" table with the species name to get the species ID.

Task 3: Get non-aggressive pets



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Task 3

• Fill in non_aggressive_pets(): Return a list of pet names whose aggressiveness is lower than a given number