Pandas + SQL

Tidy Data

June 9th, 2021

Quick note

I am going to change *tomorrow's* reading to be an SQL tutorial, so ignore the one currently on the website.

This Lecture

Some more thoughts on Pandas and SQL

1. Making Pandas DataFrames from the web

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- 2. 'Melting' data

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- 2. 'Melting' data
- 3. Let's go to the notebooks

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- 3. As a rough guide: Think tuples!

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- 1. If you have a choice, choose the one you're most comfortable with
- 2. If you don't have a choice, you use the one you have to
- 3. There are many situations where the choice is beyond your control (i.e. not just because a manager makes you)

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ID	Age	Weight (kg)	Height (cm)
1	12.2	42.3	146.1
2	11.0	40.8	143.8
3	15.6	65.3	165.3
4	35.1	84.2	185.8

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We've got Labels, Variables, and Observations

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3	15.6	65.3	165.3	5
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When the primary key from another table is used in a table, like above, we call them foreign keys

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- 3. YATTL :(

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- 1. Implementations are *very* good
- 2. Schemas are important, thinking about them ahead of time is good!
- 3. You can share data with folks across different tech stacks!
- 4. The same system can process small, medium, large, huge amounts of data.

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- 1. SQLite: The most popular database ever. By far., great for small/medium datasets
- 2. MySQL/MariaDB: Lots of documentation, very common for the web.
- 3. PostgreSQL: Fantastic for large amounts of data, 'industrial strength'

Thanks for your time!