review3

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Contents

1 CS 2316 Spring 2017 Exam 3 Topics

1.1 Previous material

- Understand questions from prior exams

1.2 Pandas

- Given dictionaries, create pd.Series, pd.DataFrame
- Recognize simple indexing
- Just know the examples on the slides

1.3 XML

- XML is a textual tree representation
- XML can represent arbitrarily nested data models (CSV files can't)
- Recognize non well-formed XML

Well-formed:

```
<a><b></b></a>
```

Not well-formed:

```
<a><b></a></b>
```

1.4 JSON

- Didn't study JSON per se, but JSON just a dictionary. Know how to manipulate dictionaries.

1.5 Python XML APIs

- Recognize correct ElementTree usage

1.6 Relational Databases

- Databases, tables, records (rows), attributes (columns)
- Understand Keys
- Understand cardinality: given some tables, are they many-to-one or many-to-many?
- Understand SQL DDL: create, insert, update, delete
- Write SQL queries (SQL DML): select, inner joins, group by with count, sum, avg
  - Know dorms.db examples

1.7 Python Database APIs

- Be able to write code that gets data from a database