



Lecture 3

Tables

Announcements

Python

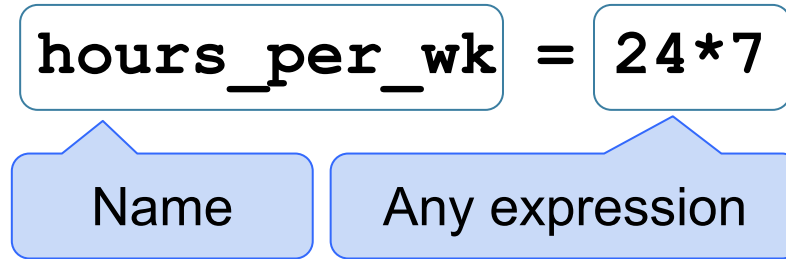
Programming Languages

- Python is popular both for data science & general software development
- Mastering the language fundamentals is critical
- Learn through practice, not by reading or listening
- Follow along: datahub.berkeley.edu

(Demo)

Names

Assignment Statements



- Statements don't have a value; they perform an action
- An assignment statement changes the meaning of the name to the left of the = symbol
- The name is bound to a value (not an equation)

(Demo)

Call Expressions

Anatomy of a Call Expression

What
function
to call

Argument to the
function

f (27)

"Call f on 27."

Anatomy of a Call Expression

What
function
to call

First argument

Second
argument

`max` (`15`, `27`)

(Demo)

Tables

Table Structure

- A Table is a sequence of labeled columns
- Each row represents one individual
- Data within a column represents one attribute of the individuals

Name	Code	Area (m2)
California	CA	163696
Nevada	NV	110567

(Demo)

Some Table Operations

- `t.select(label)` - constructs a new table with just the specified columns
 - `t.drop(label)` - constructs a new table in which the specified columns are omitted
 - `t.sort(label)` - constructs a new table with rows sorted by the specified column
 - `t.where(label, condition)` - constructs a new table with just the rows that match the condition
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Discussion Question

`nba` table:

How to display just the row corresponding to the player who had the highest salary?
