



DSFA
Spring 2021

Lecture 11

Joins and Maps

Announcements

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- Project 1 out today, part 1 due 3/19, part 2 due 3/26.
 - Get started early! Don't put it off!
 - You can work in pairs.
 - Vocareum is not Google Docs. You cannot both work on the assignment at the same time and have both people's work be saved.
 - Next week:
 - No class Wednesday (Wellness day)
 - No labs Wednesday or Thursday
 - No office hours Tuesday or Wednesday
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Joins

Joining Two Tables

```
drinks.join('Cafe', discounts, 'Location')
```

Keep all rows in the table that have a match ...

... for the value in this column ...

... somewhere in this other table's ...

... column that contains matching values.

drinks

Drink	Cafe	Price
Milk tea	Panda Tea	4
Espresso	Gimme	2
Latte	Gimme	3
Espresso	Cafe Gola	2

discounts

Coupon	Location
25%	Panda Tea
50%	Gimme
5%	Gimme

The joined column is sorted automatically

(Demo)

Cafe	Drink	Price	Coupon
Gimme	Espresso	2	50%
Gimme	Espresso	2	5%
Gimme	Latte	3	50%
Gimme	Latte	3	5%
Panda Tea	Milk Tea	4	25%

Bikes

Citibike

A bikesharing program in New York City. Bikes taken/returned to docks around the city.

All kinds of data available at <https://www.citibikenyc.com/system-data>.



Maps

Maps

A table containing columns of latitude and longitude values can be used to generate a map of markers

 .**map_table**(table, ...)

Either **Marker**
or **Circle**

Column 0: latitudes
Column 1: longitudes
Column 2: labels
Column 3: colors
Column 4: sizes

Applies to all
features:
color='blue'
size=200
