

# Data Science for Everyone – Data Wrangling

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Slides based off slides courtesy of Jordan Crouser (<https://jcrouser.github.io/>)

## Plan for Today

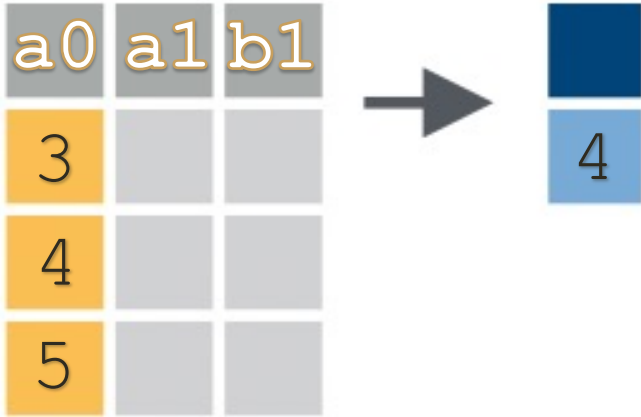
- Wrangling Data in one Table



Recap: `summarize()`

## The 5 Verbs: dplyr

**summarize()** column with a single value(s)



- Apply a summary function to a column. Ex.

```
data %>%  
  summarize(mean(a0))
```

## The 5 Verbs: dplyr

**summarize()** column with a single value(s)

a0	a1	b1
3		
4		
5		



4

```
data %>%  
  summarize(mean(a0))
```

What if I want to summarize by different groups in the data?

```
summarize()
```

What if I want to summarize by different groups in the data?

Ex. What is the average weight of red vs green fruit?

Fruit	Color	Weight
Apple	Green	150
Pear	Green	170
Strawberries	Red	300
Grapes	Green	225
Cherries	Red	190
Apple	Red	165

summarize()

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```
data %>%  
  summarize(avg_weight =  
    mean(Weight))
```

summarize()

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Ex. What is the average weight of red vs green fruit?

Fruit	Color	Weight
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Apple	Red	165

```
data %>%  
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    mean(Weight))
```

avg\_weight

200




summarize()

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Apple	Red	165

data %>%  
 summarize(avg\_weight =  
 mean(Weight))



avg\_weight  
200

We need to group the data and summarize each group...

summarize()  
by Group

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Strawberries	Red	300
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Cherries	Red	190
Apple	Red	165

```
data %>%  
  group_by(Color)
```

summarize()  
by Group

What if I want to summarize by different groups in the data?

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Apple	Green	150
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summarize()  
by Group

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Strawberries	Red	300
Grapes	Green	225
Cherries	Red	190
Apple	Red	165

```
data %>%  
  group_by(Color) %>%  
  summarize(avg_weight =  
    mean(Weight))
```



Color	avg_weight
Green	181.67
Red	218.33

# group\_by()

group\_by()

- Creates a grouped version of your dataset
- Performs following operations by groups



- Take a look at the `dplyr` cheatsheet for more  
summarize() helper functions: [R Cheatsheets](#)

Your turn!

Work with 1-2 other people on lab-group\_by