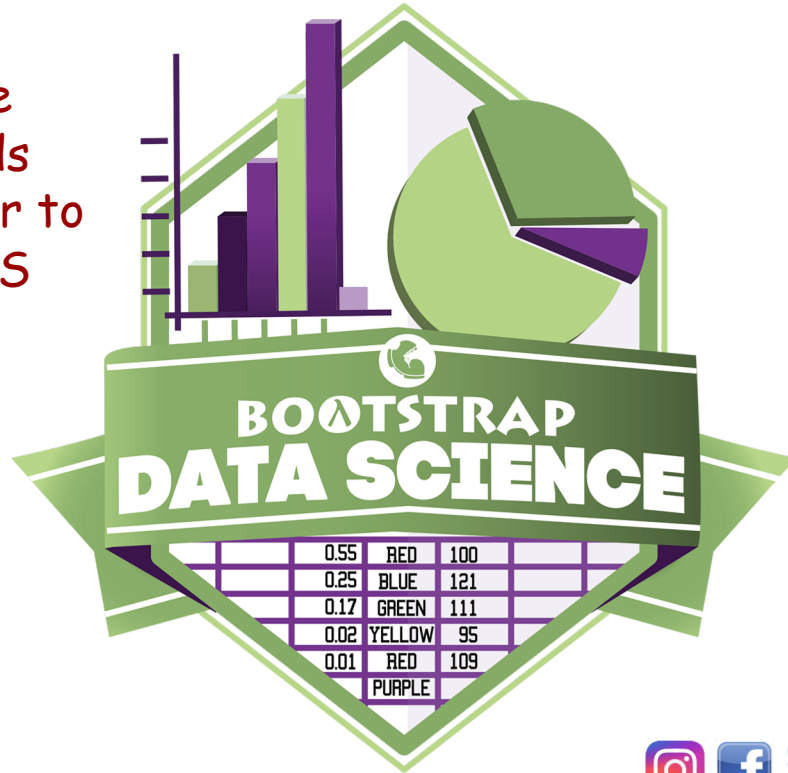


US Jobs Dataset

Aim: How do we write and use table methods and functions in order to analyze data about US Jobs?



@BootstrapWorld



Click on the link for the Spreadsheet:

[US Jobs 2019 Dataset](#)

Write two statements for each of the following:

I wonder....

I notice....



Students, write your response!



List of Table Methods

`<Table>.row-n(index)`

`<Table>.order-by("Column", Boolean)`

`<Table>.filter(Boolean function)`

`<Table>.build-column("Column", function)`

For more information, check your contracts!



List of Data Displays

`pie-chart(Table, "column")`

`bar-chart(Table, "column")`

`histogram(Table, "column", bin width)`

`scatter-plot(Table, "label", "column 1", "column 2")`

For more information, check your contracts!



US Jobs Project

Go to code.pyret.org and log in.

Then click on the link for the “US Jobs”

Save a copy of the file and add your name to the file name.

Run the file.

Enter the code for occupation-table in the interactions area. What do you see?





Submit Your Code

From now on, you are going to submit the link to your code immediately after saving a copy.

- Go to **Publish** in your Pyret editor and copy the link.
 - Ctrl + C (PC) or ⌘ + C (Apple)
- Submit your link for your code on the form:

[US Jobs Pyret Submission Form](#)

At the end of the lesson, you will save and update the link to your code.



US Jobs Pyret Code

Part 1: The method **<table>.row-n(index)** consumes the index of the row and produces the information about that row. Look at the dataset "US Jobs 2019." Choose 3 occupations and define them below.

Part 2: The method **<table>.order-by("column", Boolean)** consumes a column and a Boolean and produces a table sorted in ascending or descending order according to the Boolean. Define the table and sort the dataset according to the given column and conditions.



US Jobs Pyret Code

Part 3: Define a function called "need-bachelors" that consumes a row and checks if the occupation in the row requires a Bachelor's degree.

Part 4: The method **<table>.filter(function)** consumes a function and produces a table that only shows rows where the function is true. Define the table and filter the dataset by the appropriate functions from Part 3.



US Jobs Pyret Code

Part 5: Samples of datasets can be used to make inferences about the whole dataset. The function "random-rows" takes in a table and a number of rows and creates a sample of random rows from the table. Define a table called "tiny-sample" that contains 10 random rows.

Part 6: Create at least two different data displays, i.e. pie chart, bar chart, scatterplot, or histogram, using appropriate data for the type of chart. Write the code below.

Extension



Demonstrate anything else we've done in this class. For example, you can define other tables or show different displays. Explain what your code does.



What thoughts do you have about the US Jobs dataset?

***Remember to save your code and update your link.**



Students, write your response!