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# include Libraries we want
include shared-gdrive("Bootstrap-DataScience-v1.5.arr",
"1btFfKccas4zkQ6-SYCYMkcDCqmduzQqB")
# include Google Sheets and Tables library
include gdrive-sheets
include tables
include image
```

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```
# Load your spreadsheet and define your table
occupation-sheet = load-spreadsheet("1fAzyoVgtSMl9ja-
JMpou_Y5RRyoTOPh2umR_mkJYQyU")

occupation-table = load-table: occupation, occupation-type, tot-
employment, percent-non-white, percent-female, educ-req, annual-
median-wage, weekly-median-wage, female-weekly-median-wage
  source: occupation-sheet.sheet-by-name("US Jobs 2019", true)
end
```

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# 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.
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# Example
comp-programmers = occupation-table.row-n(28)
```

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# Occupation #1:
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```
# Occupation #2:
```

```
# Occupation #3:
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# 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.
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# Example: Define a table called "employed". Sort the table by total
employed from greatest to least.
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```
employed = occupation-table.order-by("tot-employment", false)
```

```
# Define a table called "med-wage". Sort the table by annual median
wage from greatest to least.
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# Part 3: Below is a list of functions. These functions will be used  
in Part 4.
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fun is-high-med-wage(row): row["annual-median-wage"] >= 70000 end
```

```
fun is-higher-female-wage(row): row["female-weekly-median-wage"] >=  
row["weekly-median-wage"] end
```

```
# Define a function called "need-bachelors" that consumes a row and  
checks if the occupation in the row requires a Bachelor's degree.
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# 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.
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```
# a. Define a table called "high-wage" that only shows occupations  
that have an annual median wage greater than $70000.
```

```
# b. Define a table called "higher-female" that only shows occupations  
that have a higher weekly median wage for women than the weekly median  
wage.
```

```
# How many rows are in the "higher-female" table? What does this tell  
us about women's wages in the US?
```

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# 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.
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# Define a table called "tiny-sample" that contains 10 random rows.
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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.

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Extension: Demonstrate anything else we've done in this class. For example, you can define a function that calculates the number of non-white employees or combine methods to filter and sort a table.