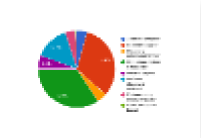
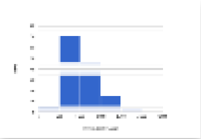
View File (US Jobs(Laks).arr) Insert Publish Run

Stop

```
######################
######
# 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


#########################################################
# 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


#########################################################

# 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.

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

# Occupation #1:
fundraiser = occupation-table.row-n(22)

# Occupation #2:
editor = occupation-table.row-n(54)

# Occupation #3:
pharmacist = occupation-table.row-n(56)
```





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```
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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.

# Example: Define a table called "employed". Sort the table by total employed from greatest to least.

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.

med-wage = occupation-table.order-by("annual-median-wage", false)


#############################################################

# Part 3: Below is a list of functions. These functions will be used in Part 4.


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.

fun needs-bachelors(row): row["educ-req"] == "Bachelor's degree" end



#############################################################
```

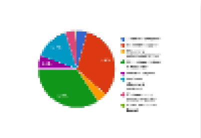

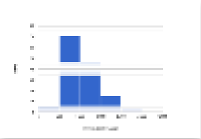

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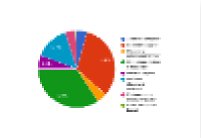
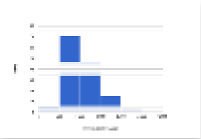
```
.ors(row): row["educ-
req"] == "Bachelor's degree" end



###########################################################

# 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.


# a. Define a table called "high-wage" that only shows occupations that have an annual median wage greater than $70000.

high-wage = occupation-table.filter(is-high-med-wage)

# 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.

higher-female = occupation-table.filter(is-higher-female-wage)

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

# There are 10 rows. There are not many jobs where women make more money than men, though there are many jobs where men make more than women.


###########################################################

# 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"
```





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