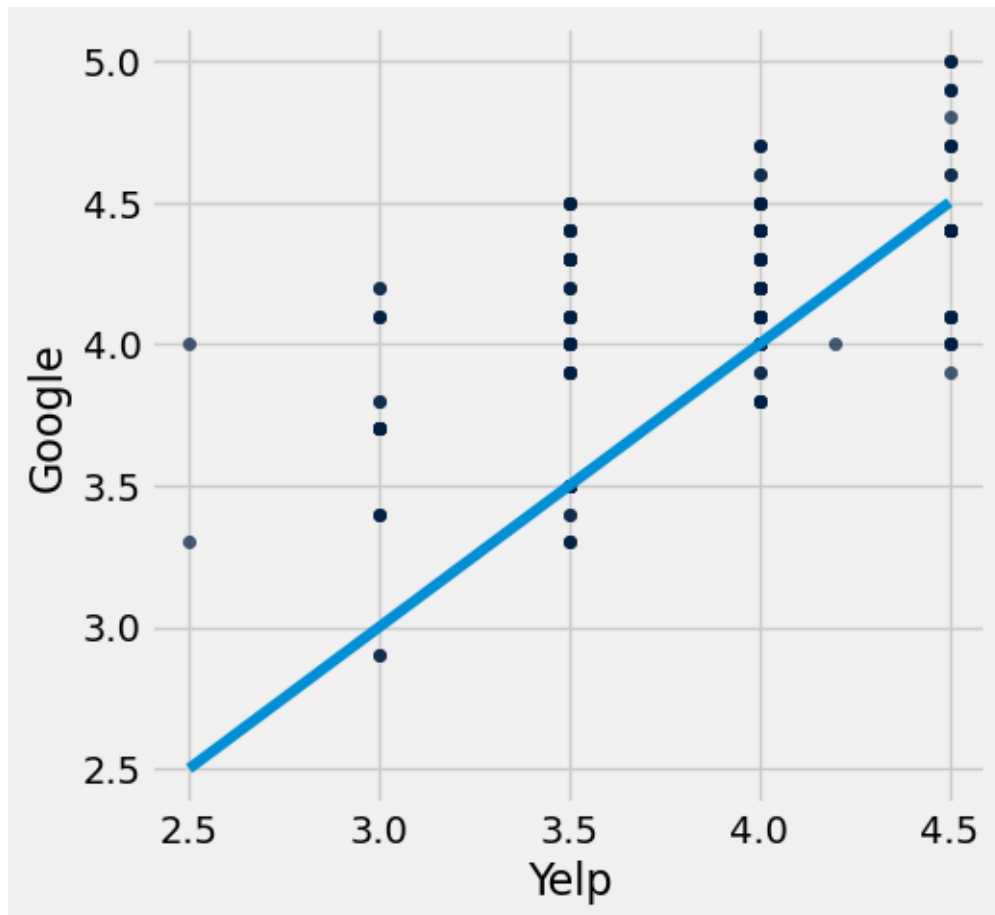


Question 2. Let's look at how the Yelp scores compare to the Google scores in the `burritos` table. First, assign `yelp_and_google` to a table only containing the columns `Yelp` and `Google`. Then, make a scatter plot with Yelp scores on the x-axis and the Google scores on the y-axis. **(8 Points)**

```
In [6]: yelp_and_google = burritos.select("Yelp", "Google")
        yelp_and_google.scatter("Yelp", "Google")

# Don't change/edit/remove the following line.
# To help you make conclusions, we have plotted a straight line on the graph (y=x).
plt.plot(np.arange(2.5, 5, .5), np.arange(2.5, 5, .5));
```



```
In [7]: grader.check("q1_2")
```

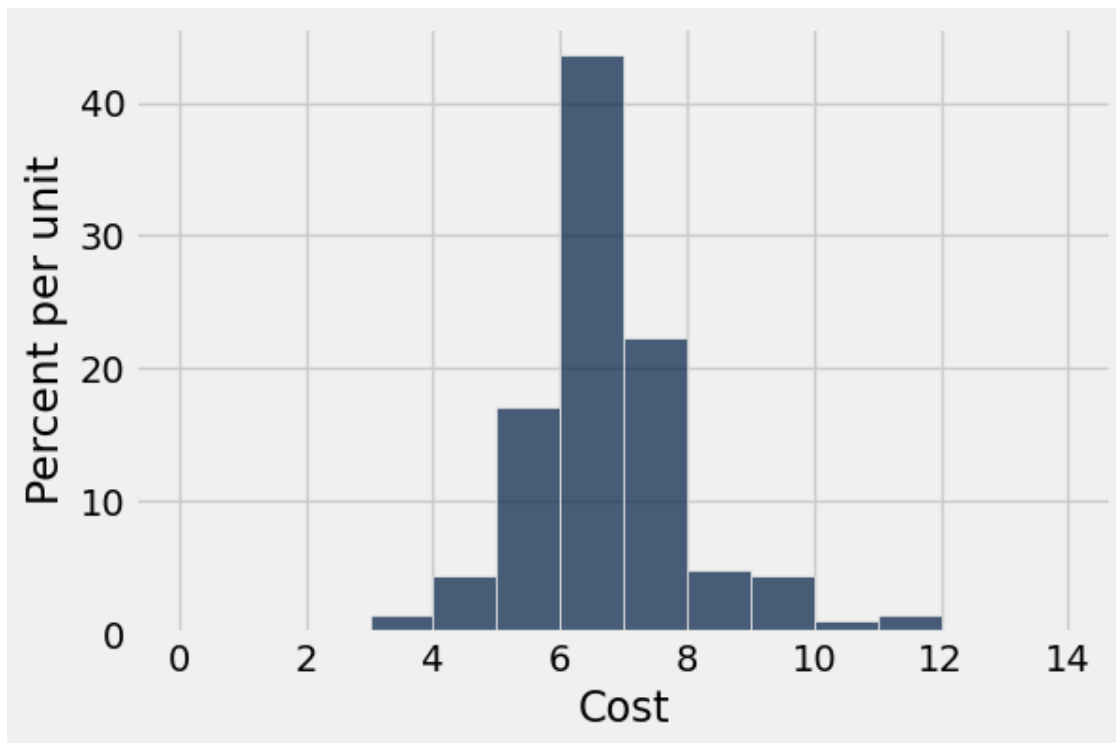
```
Out[7]: q1_2 results: All test cases passed!
```


Question 3. Looking at the scatter plot you just made in Question 1.2, do you notice any pattern(s) (i.e. is one of the two types of scores consistently higher than the other one)? If so, describe them **briefly** in the cell below. **(8 Points)**

Using the straight line on the graph as a reference, we can see that Google's scores are consistently higher than Yelp's scores. For example, when Yelp gives a score of 3.5, Google has 7 scores that are above 3.5.

Question 6. Mira thinks that burritos in San Diego are cheaper (and taste better) than the burritos in Berkeley. Plot a histogram that visualizes that distribution of the costs of the burritos from San Diego in the `burritos` table. Also use the provided `bins` variable when making your histogram, so that the histogram is more visually informative. **(8 Points)**

```
In [31]: bins = np.arange(0, 15, 1)
         # Please also use the provided bins
         burritos.hist("Cost", bins=bins)
```



Question 2. At the moment, the `Job` column of the `sf` table is not sorted (no particular order). Would the arrays you generated in the `Jobs` column of the previous question be the same if we had sorted alphabetically instead before generating them? Explain your answer. To receive full credit, your answer should reference *how* the `.group` method works, and how sorting the `Jobs` column would affect this. **(8 Points)**

Note: Two arrays are the **same** if they contain the same number of elements and the elements located at corresponding indexes in the two arrays are identical. An example of arrays that are NOT the same: `array([1,2]) != array([2,1])`.

The group method first groups “Organization Group” in alphabetically using their first letter. Then it goes down row by row in the `Jobs` column and adds the `Job` string to the corresponding array in that order. So if we had sorted alphabetically before generating them, the arrays will not be the same.

Question 4. Give an explanation as to why some of the row values are 0 in the `department_ranges` table from the previous question. **(8 Points)**

Some of the row values are 0 because some combinations of department and organization group do not exist. For example, it is unusual for a Culture & Recreation group to have a department called Adult Probation.

