

## Comparing Salaries by Company Size and Employment Status

This task involves creating a bar plot to compare salaries across company sizes, factoring in employment status. The goal is to visualize how salaries vary by 'Company\_Size' and the influence of 'Employment\_Status' on these differences.

The screenshot shows a web-based exercise interface for 'Exploratory Data Analysis'. The left sidebar contains the exercise title 'Comparing salaries' and instructions. The main area shows a code editor with a Python script and an IPython shell.

**Exercise: Comparing salaries**

Exploratory data analysis is a crucial step in generating hypotheses!

You've had an idea you'd like to explore—do data professionals get paid more in the USA than they do in Great Britain?

You'll need to subset the data by "Employee\_Location" and produce a plot displaying the average salary between the two groups.

The `salaries` DataFrame has been imported as a pandas DataFrame.

`pandas` has been imported as `pd`, `matplotlib.pyplot` as `plt` and `seaborn` as `sns`.

**Instructions (100 XP)**

- Filter `salaries` where "Employee\_Location" is "US" or "GB", saving as `usa_and_gb`.
- Use `usa_and_gb` to create a barplot visualizing "Salary\_USD" against "Employee\_Location".

[Take Hint \(-30 XP\)](#)

**Code Editor (script.py):**

```
1 # Filter for employees in the US or GB
2 usa_and_gb = salaries[____["____"].____(
3     ["____", "____"])]
4 # Create a barplot of salaries by location
5 sns.____(data=____, x="____", y="____")
6 plt.show()
```

**IPython Shell:**

```
In [1]:
```

### Answer

```
# Create a bar plot of salary versus company size, factoring in employment status
sns.barplot(data=salaries, x='Company_Size', y='Salary_USD',
hue='Employment_Status')
plt.show()
```

Explanation: This code uses Seaborn's `barplot` to visualize average salaries ('Salary\_USD') across different company sizes ('Company\_Size'), grouped by employment status ('Employment\_Status'). The `hue` parameter splits the data by employment status, enabling a clear comparison within each company size. The `plt.show()` command displays the plot.