Solution: Visualizing Seaborn Datasets

This lesson gives a detailed review of the solutions to the challenges in the previous lesson.

We'll cover the following

Heatmap solution

```
import pandas as pd
import seaborn as sns

df = sns.load_dataset('flights')  # Reading flights dataset from seaborn package

# Reshaping the DataFrame
df = pd.pivot_table(df, values = 'passengers', index = ['month'], columns = 'year')

# Plotting the heatmap
sns.heatmap(df, annot = True, fmt = '')
```

The above problem plots the data on a heatmap after reshaping it.

On **line** 7, the `pivot_table` function is used to reshape the dataset according to our requirements. The `passengers` are set as values and the `month` and `year` as row and column indexes, respectively, as we want to display the count of people on different months and years.

On **line 10**, the `heatmap` function of the seaborn is used to plot the reshaped dataset onto a heatmap. The `fmt` parameter keeps the numbers on the heatmap concise for a better view and understanding. It is basically a number formatting function. Try plotting the heatmap without it and observe how it affects the display.

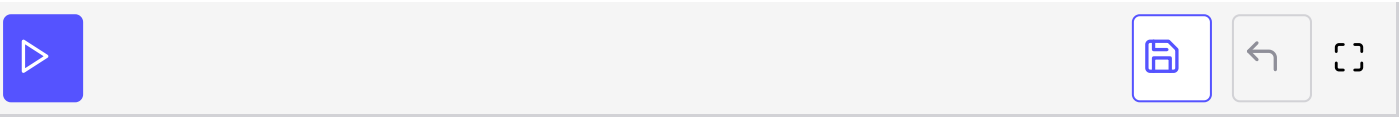
Regression plot solution

```
import pandas as pd
import seaborn as sns
```

```
import seaborn as sns

df = sns.load_dataset('anscombe') # Reading anscombe dataset from seaborn package


# Plotting the regression plot
sns.lmplot(x = 'x', y = 'y', data = df)
```



The above problem plots a regression plot to observe the relationship between the `x` and `y` column of the dataset.

On **line 8**, the `lmplot` function is used to plot this visualization. The plot clearly shows the positive correlation between these two data values, which means that as the value of `x` increases the value of `y` also increases and vice versa.

A quiz awaits to test your understanding in the next lesson.