**Task 7**

Heatmap and Count plot

A heatmap and a count plot are both types of data visualizations commonly used in data analysis and data science to understand and explore datasets. Let's explain each of them with some Python code using the Seaborn library, which is a popular data visualization library built on top of Matplotlib.

1. Heatmap:

A heatmap is a graphical representation of data where values in a matrix are represented as colors. It is often used to visualize the correlation between variables in a dataset. Darker colors typically represent higher values, while lighter colors represent lower values.

Code Explanation:

We import Seaborn and Matplotlib.

We load an example dataset (the Iris dataset in this case) as data.

We calculate the correlation matrix using data.corr().

We create a heatmap using sns.heatmap(). The annot=True parameter adds values to the cells, and cmap specifies the color map.

2. Countplot:

A countplot is a type of bar plot that displays the number of occurrences of categorical variables. It's useful for visualizing the distribution of categorical data.

Code Explanation:

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We import Seaborn and Matplotlib.

We load an example dataset (the Tips dataset in this case) as data.

We create a count plot using sns.countplot(). We specify the categorical variable to plot on the x-axis using the x parameter and set the color palette using the palette parameter.

Your Task :- You your is to learn and understand about the countplot and Heatmap functions and apply it on any dataset you want and sent me a report and what have you learned and what have you concluded.

Code:- https://github.com/rishabhgoyal0498/Task-7