Standard Normal Distribution

Breakdown :

1. def stdNBgraph(dataset):
    - This line defines a function named stdNBgraph that accepts one argument, dataset.
2. import seaborn as sns
    - This line imports the seaborn library for statistical data visualization. It's aliased as sns, which is a common convention.
3. mean=dataset.mean()
    - This line calculates the **standard deviation** of the dataset and assigns it to a variable named mean.
4. std=dataset.std()
    - This line calculates the standard deviation of the dataset again and assigns it to a variable named std.
5. values=[i for i in dataset]
    - This line creates a list named values containing all the elements from the dataset. This is a list comprehension, which is a concise way to create a list.
6. z_score=[(j-mean)/std for j in values]
    - This is another list comprehension. It iterates through each element j in the values list.
    - For each element, it calculates a z-score using the formula: (j−mean)/std.
    - The z-score for a data point indicates how many standard deviations away from the mean a data point is.
    - The results are stored in a new list named z_score.
7. sns.displot(z_score, kde=True)
    - This line uses the seaborn library to create a distribution plot (displot) of the z_score list.
    - kde=True adds a Kernel Density Estimate (KDE) line to the plot, which smooths the distribution and helps visualize the underlying probability density.