Standard Normal Distribution Explanation

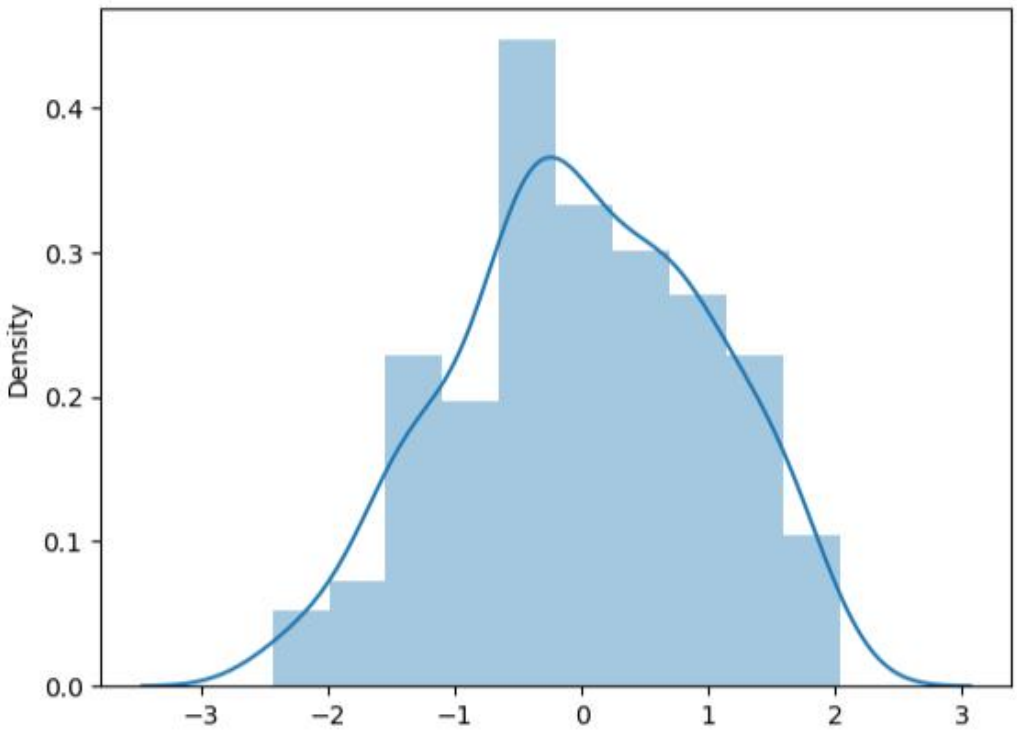
```python
def stdNBgraph(dataset):
        # Coverted to standard Normal Distribution
    import seaborn as sns
    mean=dataset.mean()
    std=dataset.std()

    values=[i for i in dataset]

    z_score=[((j-mean)/std) for j in values]

    sns.distplot(z_score,kde=True)

    sum(z_score)/len(z_score)
    #z_score.std()
```



· We imported **seaborn** for visualization.

· Calculated the **mean** and **standard deviation** of the dataset.

· Converted each value in the dataset into its **Z-score** using (x−mean)/std

· Used **distplot** to visualize the Z-scores as a standard normal distribution curve.

· Verified standardization:

The mean of Z-scores should be ≈ **0**.

The standard deviation of Z-scores should be ≈ **1**.

The KDE (Kernel Density Estimation) shows the **bell-shaped curve** of the normal distribution.