Statistic

Certainly! Using pandas and numpy, you can perform various statistical calculations on a dataset. Below are examples of how to find mean, median, mode, measures of dispersion (variance, standard deviation, range), measures of skewness and kurtosis, as well as conduct normality tests for a dataset:

```
import pandas as pd

import numpy as np

from scipy.stats import skew, kurtosis, Shapiro


# Create a sample DataFrame

data = {'value': [2, 4, 5, 7, 8, 9, 12, 15, 18, 22]}

df = pd.DataFrame(data)


# Mean

mean_value = np.mean(df['value'])


# Median

median_value = np.median(df['value'])


# Mode

mode_value = df['value'].mode().iloc[0]
```

```python
# Variance
variance_value = np.var(df['value'])


# Standard Deviation
std_deviation_value = np.std(df['value'])


# Range
range_value = np.ptp(df['value'])
# Skewness
skewness_value = skew(df['value'])


# Kurtosis
kurtosis_value = kurtosis(df['value'])



# Shapiro-Wilk Test for Normality
stat, p_value = shapiro(df['value'])


# Check for normality based on the p-value
if p_value > 0.05:
    print("The data appears to be normally distributed.")
else:
    print("The data does not appear to be normally distributed.")
```