

Practical 9

Python programs to demonstrate the use of mean, median, mode, standard deviation and variance.

```
import statistics

# Sample data
data = [10, 20, 20, 30, 40, 50]

# Calculate mean
mean_value = statistics.mean(data)

# Calculate median
median_value = statistics.median(data)

# Calculate mode
try:
    mode_value = statistics.mode(data)
except statistics.StatisticsError:
    mode_value = "No unique mode found"

# Calculate standard deviation
std_dev = statistics.stdev(data)

# Calculate variance
variance_value = statistics.variance(data)

# Print the results
print(f'Data: {data}')
print(f'Mean: {mean_value}')
print(f'Median: {median_value}')
print(f'Mode: {mode_value}')
print(f'Standard Deviation: {std_dev}')
print(f'Variance: {variance_value}')
```