# Fourth Moment: Kurtosis

### Python Code

# Import kurtosis from scipy.stats  
from scipy.stats import kurtosis  
  
# Calculate the excess kurtosis of the returns distribution  
excess\_kurtosis = kurtosis(clean\_returns)  
print(excess\_kurtosis)  
  
# Derive the true fourth moment of the returns distribution  
fourth\_moment = excess\_kurtosis + 3  
print(fourth\_moment)

### Explanation in Simple Words (50 words)

Kurtosis tells us about the 'tailedness' of a distribution. First, we calculate excess kurtosis using the kurtosis() function. Then, to get actual kurtosis, we add 3. A high value means more extreme returns (fat tails); a low one means fewer extremes. This helps assess risk of outlier returns.

### Screenshot

