Pearson Correlation Coefficient [AQR Python Interview Question]

Given two vectors, represented as lists X and Y, return the Pearson Correlation Coefficient.

p.s. this is the same as question 9.8 in Ace the Data Science Interview.

p.p.s. AQR is a competitive hedge fund so they test their Quants & Data Science on both coding & math/stats skills, so they expect you to know the Pearson correlation coefficient formula.

But, if you don't know the formula, don't worry – just use the hints below to learn more about Pearson correlation \mathbb{Q}