We can divide our covariance value by the standard deviations of our two variables (actually standard deviation of x multiplied by standard deviation of y) – in other words:

$$= \frac{\sum \left(x_i - \overline{x}\right) \left(y_i - \overline{y}\right)}{N - 1 s_x s_y}$$

 This is called the Pearson product-moment correlation coefficient and ranges from -1 (perfect negative correlation) to +1 (perfect positive correlation) with 0 meaning on correlation at all.

- SD of Study Time (X) = 1.140175
- SD of Exam Score (Y) = 0.8944272

$$\mbox{Pearson's R} = \frac{\sum \left(x_i - \overline{x}\right) \left(y_i - \overline{y}\right)}{N - 1 s_x s_y} \label{eq:resons}$$

Pearson's R =
$$\frac{2.8}{4 \times 1.14 \times 0.89}$$

= 0.69