

## Correlation Pseudo code

### average

start with totalX (wins) & TotalY (payroll)

↳ set to 0 before

For loop  $\rightarrow$  run 30 times

↳ add next Int to total X, total Y

↳ 2 variables  $\times$  30 iterations = 60 data points

Divide both total X, total Y by  $(30)$   $\leftarrow$  keep 30 a constant

### Standard Deviation

Start with total X, total Y  $\Rightarrow$  set to 0 initially

For loop  $\rightarrow$  run 30 times

total X  $+=$  (next Int - average X)<sup>2</sup>

total Y  $+=$  (next Int - average Y)<sup>2</sup>

First Divide by  $(29)^{(30-1)}$  and then square root the result

### Correlation Coefficient

Correlation Total = 0

For loop  $\rightarrow$  run 30 times

Correlation Total  $+=$   $\frac{(\text{next Int} - \text{average X})}{\text{stdev X}} \times \frac{(\text{next Int} - \text{average Y})}{\text{stdev Y}}$

$r = \frac{1}{(29)^{(30-1)}} \times \text{Correlation Total}$