

Correlation

$$r_{xy} = \frac{n \sum x_i y_i - \sum x_i \sum y_i}{\sqrt{n \sum x_i^2 - (\sum x_i)^2} \sqrt{n \sum y_i^2 - (\sum y_i)^2}}$$

- ◆ We have **count(data)**, **sumxy(data)**, **sumx(data)**, **sumy(data)**, **sumx2(data)**, and **sumy2(data)**
- ◆ Shouldn't be too hard to compute this
- ◆ Translate $\sum x_i$ to **sumx()**

```
def count(list_of_pairs):  
    return sum(1 for i in list_of_pairs)
```


Everyone got it?