- If the temperatures were independent, then

$$\mathbb{P}(X \geq 60 \wedge Y \geq 60) = \mathbb{P}(X \geq 60)\mathbb{P}(Y \geq 60) = 0.567 * 0.604 = 0.342.$$

- In reality,

$$\mathbb{P}(X \geq 60 \wedge Y \geq 60) = \frac{57}{134} \approx 0.425.$$

- That is to say: if it is warm on 4/15/n, then it is more likely than average to be warm on 4/15/n.
- We can also compute:

$$\mathbb{P}(Y_n \geq 60 | X_n \geq 60) = \frac{57/134}{76/134} = \frac{57}{76} = 75\%,$$

but

$$\mathbb{P}(Y_n \geq 60) = 60.4\%.$$