- More generally, we can have

$$\mathbb{P}(X = 1 \wedge Y = 1) = \mathbb{P}(X = 0 \wedge Y = 0) = \alpha,$$

$$\mathbb{P}(X = 1 \wedge Y = 0) = \mathbb{P}(X = 0 \wedge Y = 1) = \frac{1}{2} - \alpha,$$

- For example: $\alpha = 1/2$:
  - Let X be a random coin flip;
  - Set $Y = X$.
- For example, $\alpha = 0$:
  - Let X be a random coin flip;
  - Set $Y = 1 - X$.