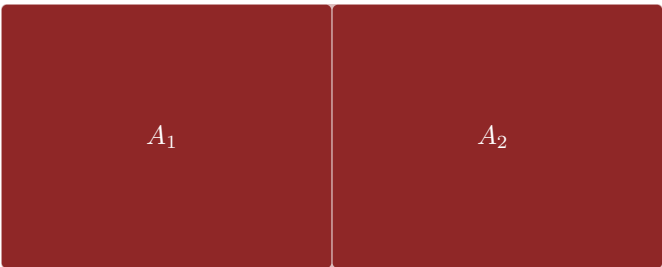


$$A_0 = X$$

$$\mathbb{P}[A_0] = 1$$

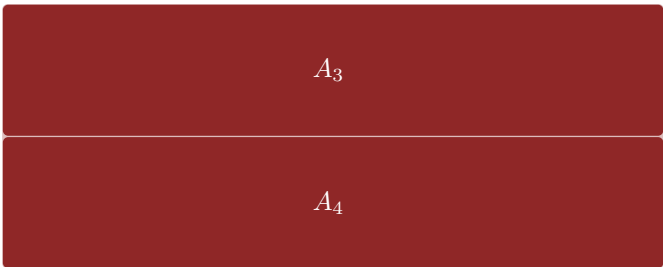


$$A_1$$

$$A_2$$

$$A_1 \cup A_2 = A_0$$

$$\mathbb{P}[A_1] + \mathbb{P}[A_2] = \mathbb{P}[A_0] = 1$$

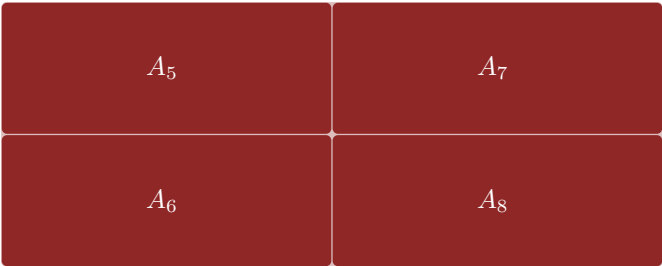


$$A_3$$

$$A_4$$

$$A_3 \cup A_4 = A_0$$

$$\mathbb{P}[A_3] + \mathbb{P}[A_4] = \mathbb{P}[A_0] = 1$$



$$A_5$$

$$A_7$$

$$A_6$$

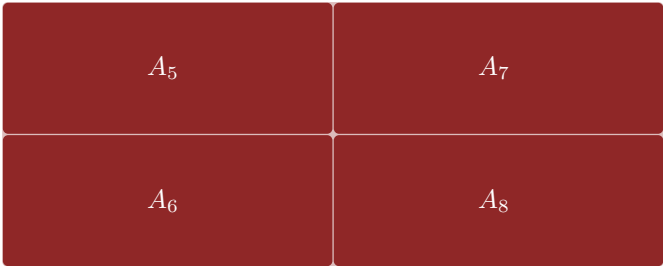
$$A_8$$

$$A_5 \cup A_6 = A_1$$

$$\mathbb{P}[A_5] + \mathbb{P}[A_6] = \mathbb{P}[A_1]$$

$$A_7 \cup A_8 = A_2$$

$$\mathbb{P}[A_7] + \mathbb{P}[A_8] = \mathbb{P}[A_2]$$



$$A_5$$

$$A_7$$

$$A_6$$

$$A_8$$

$$A_5 \cup A_7 = A_3$$

$$\mathbb{P}[A_5] + \mathbb{P}[A_7] = \mathbb{P}[A_3]$$

$$A_6 \cup A_8 = A_4$$

$$\mathbb{P}[A_6] + \mathbb{P}[A_8] = \mathbb{P}[A_4]$$

$$A_5 \cup A_6 \cup A_7 \cup A_8 = A_1 \cup A_2 = A_0$$

$$\mathbb{P}[A_5] + \mathbb{P}[A_6] + \mathbb{P}[A_7] + \mathbb{P}[A_8] = \mathbb{P}[A_1] + \mathbb{P}[A_2] = \mathbb{P}[A_0] = 1$$

$$A_5 \cup A_6 \cup A_7 \cup A_8 = A_3 \cup A_4 = A_0$$

$$\mathbb{P}[A_5] + \mathbb{P}[A_6] + \mathbb{P}[A_7] + \mathbb{P}[A_8] = \mathbb{P}[A_3] + \mathbb{P}[A_4] = \mathbb{P}[A_0] = 1$$