

Suppose we choose **one** card at random from a deck of 52 playing cards.

$$C = \{A\clubsuit, 2\clubsuit, \dots, K\clubsuit, A\diamondsuit, 2\diamondsuit, \dots, K\diamondsuit, A\heartsuit, 2\heartsuit, \dots, K\heartsuit, A\spadesuit, 2\spadesuit, \dots, K\spadesuit\}$$

$$K = \text{event of king} = \{K\clubsuit, K\diamondsuit, K\heartsuit, K\spadesuit\}$$

$$H = \text{event of heart} = \{A\heartsuit, 2\heartsuit, \dots, K\heartsuit\}$$

J = event of jack or better

$$= \{J\clubsuit, J\diamondsuit, J\heartsuit, J\spadesuit, Q\clubsuit, Q\diamondsuit, Q\heartsuit, Q\spadesuit, K\diamondsuit, K\heartsuit, K\spadesuit, A\clubsuit, A\diamondsuit, A\heartsuit, A\spadesuit\}$$

$$Q = \text{event of queen} = \{Q\clubsuit, Q\diamondsuit, Q\heartsuit, Q\spadesuit\}$$