

age	income	student	credit_rating	buys_computer
<=30	high	no	fair	no
<=30	high	no	excellent	no
31...40	high	no	fair	yes
>40	medium	no	fair	yes
>40	low	yes	fair	yes
>40	low	yes	excellent	no
31...40	low	yes	excellent	yes
<=30	medium	no	fair	no
<=30	low	yes	fair	yes
>40	medium	yes	fair	yes
<=30	medium	yes	excellent	yes
31...40	medium	no	excellent	yes
31...40	high	yes	fair	yes
>40	medium	no	excellent	no

age >40 , income low

$$P(X | \text{buy} = \text{yes}) = \frac{9}{9} \times \frac{9}{9}$$

$$P(X | \text{buy} = \text{no}) = \frac{2}{5} \times \frac{1}{5}$$

$$P(\text{age} > 40 | \text{buy} = \text{yes}) = \frac{9}{9}$$

$$P(\text{age} > 40 | \text{buy} = \text{no}) = \frac{2}{5}$$

$$P(\text{income low} | \text{buy} = \text{yes}) = \frac{9}{9}$$

$$P(\text{income low} | \text{buy} = \text{no}) = \frac{1}{5}$$

P(buy)

$$\times \frac{9}{14} = \frac{1}{14} = 0.071$$

$$\times \frac{5}{14} = \frac{2}{40} = 0.028$$

P(No)