P(c1) : P(buys = yes) = 9/14 = 0.643

P(c2) : P(buys = No) = 5/14 = 0.357

P(x|c)

P(age 31...40 | buys = yes) = 4/9 0.444 + 1

P(age 31...40 | buys = No) = 0/5 0 ~ 1/5 = 0.2

P(income = high | buys = yes) = 2/9 0.222

P(income = high | buys = No) = 2/5 0.4

P(student = yes | buys = yes) = 6/9 0.222

P(student = yes | buys = NO) = /5 0.2

P(credit_rating = fair | buys = yes) = 2/9 0.222

P(credit_rating = fair | buys = No) = 2/5 = 0.4

input => Age = 31..40, income = high, student = yes, credit_rating = fair

P(x|c) : P(x | buys = yes) = 1.444 × 0.222 × 0.667 × 0.667 = 0.142

P(x|c) : P(x | buys = No) = 0.2 × 0.4 × 0.2 × 0.4 = 0.064

P(x|ci) * P(ci) : P(x|buys = yes) * P(buys = yes) = 0.785

P(x|buys = No) * P(buys = No) = 0.035

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