$P(C_i)$: buys_computer = 'yes' → 9/1A = 0.643

buys_computer = 'no' → 5/1A = 0.357

$P(X|C_i)$

$P(age = "31...40" | buy\_computer = "yes") = A/9 = 0.AA$ +1

$P(age = "31...40" | buy\_computer = "no") = "no") = 0/5 = 0$ → 1/5 = 0.2

$P(income = "high" | buy\_computer = "yes") = 2/9 = 0.22$

$P(income = "high" | buy\_computer = "no") = 2/5 = 0.A$

$P(std = "yes" | buy\_computer = "yes") = 6/9 = 0.67$

$P(std = "yes" | buy\_computer = "no") = 1/5 = 0.2$

$P(Cradit = "fiar" | buy\_computer = "yes") = 6/9 = 0.67$

$P(Cradit = "fiar" | buy\_computer = "no") = 2/5 = 0.4$

$P(x|C_i): P(X | buys\_computer = "yes") = 1.AA \times 0.22 \times 0.67 \times 0.67 = 0.142$

$P(x | buys\_computer = "no") = 0.2 \times 0.A \times 0.2 \times 0.A = 0.00LA$

$P(X|C_i) * P(C_i): P(X | buys\_computer = "yes") * P(buys\_computer = "yes") = 0.1A2 \times 0.643 = 0.091$

$P(X | buys\_computer = "no") * P(buys\_computer = "no") = 0.00LA \times 0.357 = 0.002$

Therefore, X belongs to class ("buys_computer = yes") #

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