เลือกแอตทริบิวต์ → root node

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

Data มี 12 rows

$$Info(D) = I(8,4) = -\frac{8}{12}\log_2\left(\frac{8}{12}\right) - \frac{5}{12}\log_2\left(\frac{5}{12}\right) = 0.9183$$

$$Info_{age}(D) = \frac{4}{12}I(2,2) + \frac{3}{12}I(3,0) + \frac{5}{12}I(3,2) = 0.4558$$

age	p_i	n_i	$I(p_i, n_i)$
<=30	2	2	0.8617
31...40	3	0	0
>40	3	2	0.4046

$$Info_{income}(D) = \frac{4}{12}I(2,2) + \frac{5}{12}I(4,1) + \frac{3}{12}I(2,1) = 0.8143$$

income	p_i	n_i	$I(p_i, n_i)$
high	2	2	0.8617
medium	4	1	0.8271
low	2	1	0.7296

$$Info_{student}(D) =$$