

Problem 3: Buys Computer

Consider the following buys computer data set, in which we have 4 attributes: Age, Income, Student, and Credit rating, and the subject, Buys computer can be either yes or no. Based on the following instances, construct decision tree classification by using information gain.

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