

Cust. ID	Age	Capital Gain	Savings	Attrite
1	41 mid	low	low	yes
2	35 young	high	low	no
3	26 young	low	high	yes
4	37 mid	low	high	yes
5	32 young	high	low	no
6	40 mid	low	low	yes
7	30 young	high	low	no
8	21 young	low	low	no
9	28 young	high	low	no
10	27 young	low	high	yes

Suppose age is discretized at 36. (Names 'young' and 'mid' are given as simplifications). Ignore Cust. ID as an attribute.

Show the ID3 decision tree process (using information gain) for choosing the first attribute to branch on. Show how to use the tree to predict Attrite for a new person who is 33 with Capital Gain low and Savings high.