

Sheet1

REC	Age	Income	Student	Credit_rating	Buys_computer
r1	<=30	High	Yes	Fair	No
r2	<=30	High	No	Excellent	No
r3	31...40	High	No	Fair	Yes
r4	>40	Medium	No	Fair	Yes
r5	>40	Low	Yes	Fair	Yes
r6	>40	Low	Yes	Excellent	No
r7	31...40	Low	Yes	Excellent	Yes
r8	<=30	Medium	No	Fair	No
r9	<=30	Low	Yes	Fair	Yes
r10	>40	Medium	Yes	Fair	Yes
r11	<=30	Medium	No	Excellent	Yes
r12	31...40	Medium	Yes	Excellent	Yes
r13	31...40	High	No	Fair	Yes
r14	>40	Medium	No	Excellent	No
r15	<=30	Medium	No	Excellent	No
r16	<=30	Low	No	Fair	No
r17	<=30	Low	No	Excellent	No
r18	31...40	Low	Yes	Fair	Yes
r19	>40	Medium	Yes	Excellent	Yes
r20	31...40	High	No	Excellent	Yes

$$E(S) = \sum_{i=1}^c -p(i) * (\log_2 p(i))$$