Target : Y=9 N=5.

$H(D) = -\frac{9}{14}\log(\frac{9}{14}) - \frac{5}{14}\log(\frac{5}{14}) = 0.94$

Attribute :

Appearance : Ah : 3Y+2N; Good : 2Y+3N; Great : 4Y.

$H(F_{Great}) = -\frac{4}{4}\log(\frac{4}{4}) = 0$

$H(F_{Good}) = -\frac{2}{5}\log(\frac{2}{5}) - \frac{3}{5}\log(\frac{3}{5}) = 0.971$

$H(F_{Ah}) = -\frac{3}{5}\log(\frac{3}{5}) - \frac{2}{5}\log(\frac{2}{5}) = 0.971$

$H(D|F_{App}) = \frac{4}{14}H(F_{Great}) + \frac{5}{14}H(F_{Good}) + \frac{5}{14}H(F_{Ah})$

$= 0.693$

Income : Low : 2Y+2N; Good : 4Y+2N; Great : 3Y+N

$H(F_{Low}) = -\frac{1}{2}\log(\frac{1}{2}) - \frac{1}{2}\log(\frac{1}{2}) = 1$

$H(F_{Good}) = -\frac{2}{3}\log(\frac{2}{3}) - \frac{1}{3}\log(\frac{1}{3}) = 0.918$

$H(Great) = -\frac{3}{4}\log(\frac{3}{4}) - \frac{1}{4}\log(\frac{1}{4}) = 0.811$

$H(D|F_{Income}) = \frac{4}{14}H(F_{Low}) + \frac{6}{14}H(F_{Good}) + \frac{4}{14}H(F_{Great})$

$= 0.911.$

Age : Younger : 6Y+1N; older : 3Y+4N

$H(F_{younger}) = -\frac{6}{7}\log(\frac{6}{7}) - \frac{1}{7}\log(\frac{1}{7}) = 0.592$

$H(F_{older}) = -\frac{3}{7}\log(\frac{3}{7}) - \frac{4}{7}\log(\frac{4}{7}) = 0.985$

$H(D|F_{Age}) = \frac{1}{2}H(F_{younger}) + \frac{1}{2}H(F_{older})$

$= 0.789$

Profession : Unstable : 3Y+3N; steady : 6Y+2N

$H(F_{unstable}) = -\frac{1}{2}\log(\frac{1}{2}) - \frac{1}{2}\log(\frac{1}{2}) = 1$

$H(F_{steady}) = -\frac{3}{4}\log(\frac{3}{4}) - \frac{1}{4}\log(\frac{1}{4}) = 0.811$

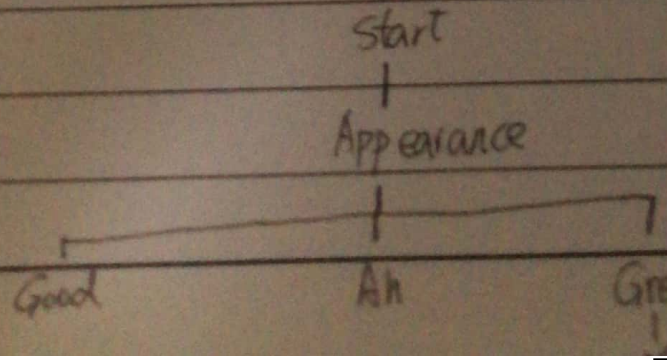
$H(D|F_{pro}) = \frac{6}{14}H(F_{unstable}) + \frac{8}{14}H(F_{steady}) = 0.892$

$G(D|F_{App}) = H(D) - H(D|F_{App}) = 0.94 - 0.693 = 0.246$

$G(D|F_{Inc}) = H(D) - H(D|F_{Inc}) = 0.94 - 0.911 = 0.029$

$G(D|F_{Age}) = H(D) - H(D|F_{Age}) = 0.94 - 0.789 = 0.151$

$G(D|F_{pro}) = H(D) - H(D|F_{pro}) = 0.94 - 0.892 = 0.048$



For Appearance = Good Branch:

Target Y=2 N=3 $H(D) = \boxed{0.971}$

Attribute:

Income: Low: 2N $H(F_{low}) = 0$
Good: N+Y $H(F_{Good}) = 1$
Great: Y $H(F_{Great}) = 0$

$$H(D|F_{Inc}) = \frac{2}{5}H(F_{low}) + \frac{2}{5}H(F_{Good}) + \frac{1}{5}H(F_{Great})$$

$$= \boxed{0.4}$$

Age: older: 3N $H(F_{older}) = 0$
younger: 2Y $H(F_{younger}) = 0$

$H(D|F_{Inc}) = \boxed{0}$

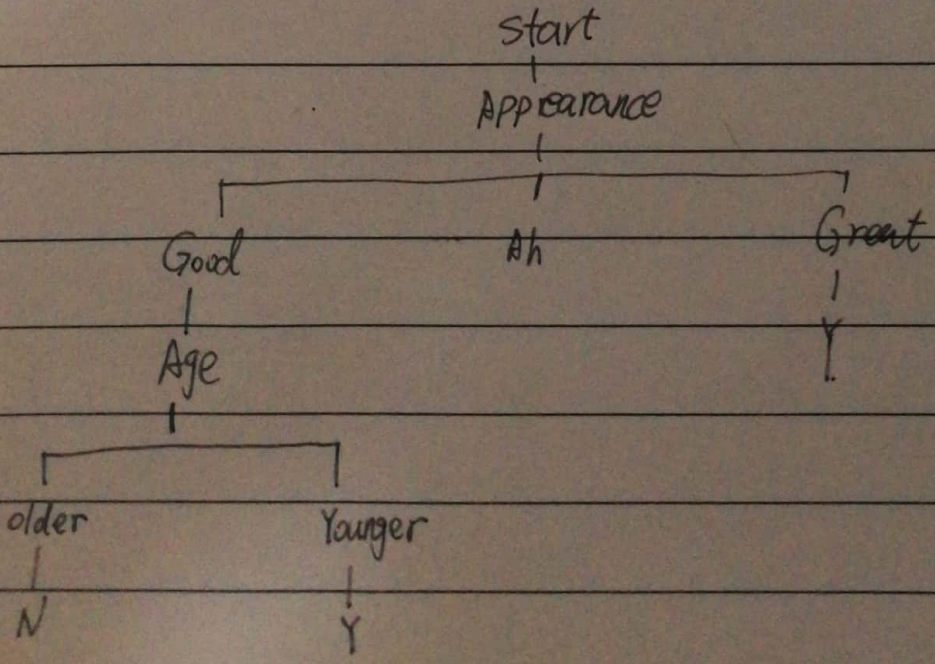
Profession: steady: Y+2N $H(F_{steady}) = -\frac{1}{3}\log(\frac{1}{3}) - \frac{2}{3}\log(\frac{2}{3}) = 0.918$
unstable: N+Y $H(F_{unstable}) = 1$

$$H(D|F_{pro}) = \frac{3}{5}H(F_{steady}) + \frac{2}{5}H(F_{unsteable}) = \boxed{0.951}$$

$G(D|F_{Inc}) = H(D) - H(D|F_{Inc}) = 0.971 - 0 = 0.571$

$G(D|F_{Age}) = H(D) - H(D|F_{Age}) = 0.971 - 0 = \boxed{0.971}$

$G(D|F_{pro}) = H(D) - H(D|F_{pro}) = 0.971 - 0.951 = 0.02$



For Appearance = Ah Branch.

Target Y=3 N=2 $H(D) = \boxed{0.971}$

Attribute:

Income: Good: 2Y+N, Great: Y+N

$H(F_{Good}) = -\frac{2}{3}\log(\frac{2}{3}) - \frac{1}{3}\log(\frac{1}{3}) = 0.918$

$H(F_{Great}) = 1$

$H(D|F_{Inc}) = \frac{3}{5}H(F_{Good}) + \frac{2}{5}H(F_{Great}) = \boxed{0.951}$

Age: older: Y+N, Younger: 2Y+N

$H(F_{older}) = 1$

$H(F_{younger}) = 0.918$

$H(D|F_{Age}) = \frac{2}{5}H(F_{older}) + \frac{3}{5}H(F_{younger}) = \boxed{0.951}$

Profession: steady: 3Y, Unstable: 2N

$H(F_{steady}) = 0$

$H(F_{unstable}) = 0$

$H(D|F_{pro}) = \boxed{0}$

$G(D|F_{Inc}) = H(D) - H(D|F_{Inc}) = 0.971 - 0.951 = 0.02$

$G(D|F_{Age}) = H(D) - H(D|F_{Age}) = 0.971 - 0.951 = 0.02$

$G(D|F_{pro}) = H(D) - H(D|F_{pro}) = 0.971 - 0 = \boxed{0.971}$