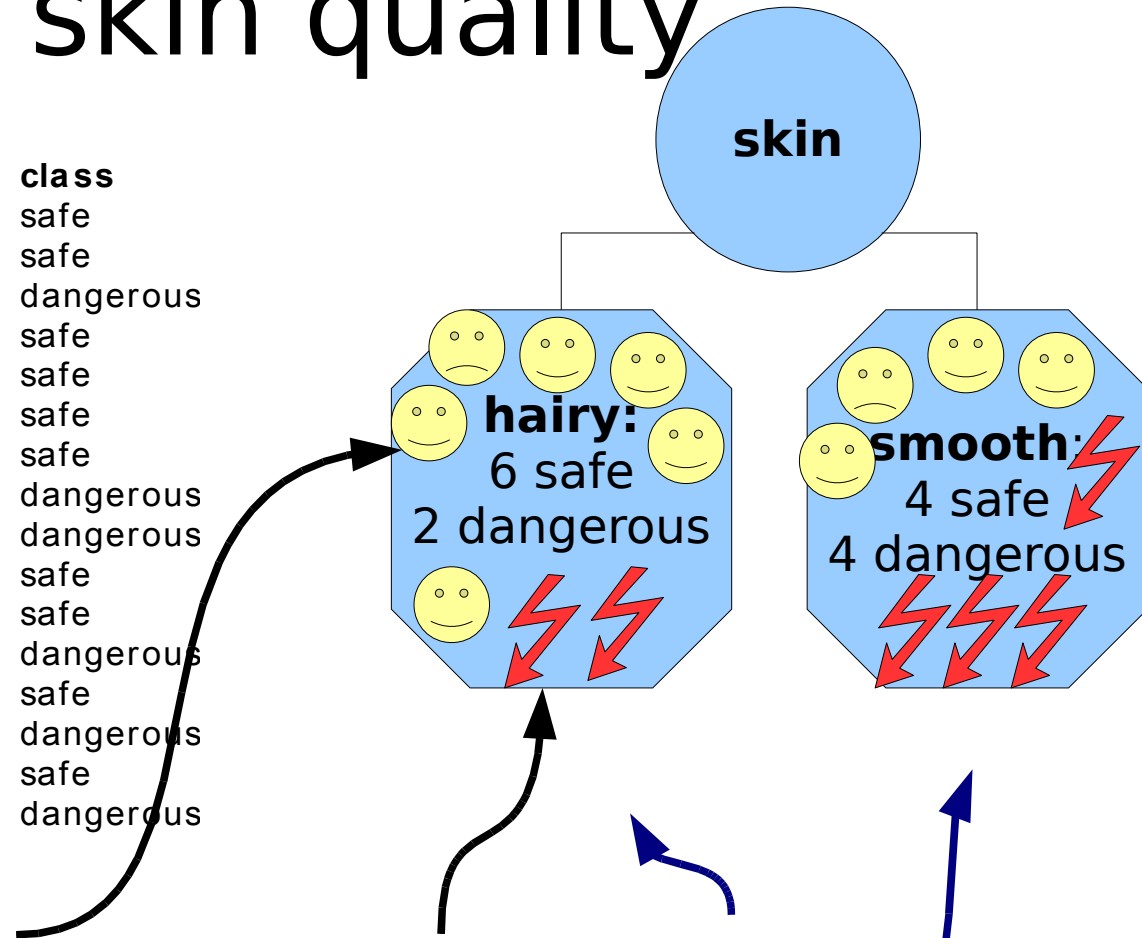


Split on skin quality

skin	color	size	flesh	class
1 hairy	brown	large	hard	safe
2 hairy	green	large	hard	safe
3 smooth	red	large	soft	dangerous
4 hairy	green	large	soft	safe
5 hairy	red	small	hard	safe
6 smooth	red	small	hard	safe
7 smooth	brown	small	hard	safe
8 hairy	green	small	soft	dangerous
9 smooth	green	small	hard	dangerous
10 hairy	red	large	hard	safe
11 smooth	brown	large	soft	safe
12 smooth	green	small	soft	dangerous
13 hairy	red	small	soft	safe
14 smooth	red	large	hard	dangerous
15 smooth	red	small	hard	safe
16 hairy	green	small	hard	dangerous



Entropy for the node [skin:hairy] = $-\frac{6}{8} \log\left(\frac{6}{8}\right) - \frac{2}{8} \log\left(\frac{2}{8}\right) = 0.24$

Entropy for the node [skin:smooth] = $-\frac{4}{8} \log\left(\frac{4}{8}\right) - \frac{4}{8} \log\left(\frac{4}{8}\right) = 0.30$

Averaged entropy of the split on skin attribute = $\frac{8}{16} * 0.24 + \frac{8}{16} * 0.30 = \mathbf{0.27}$