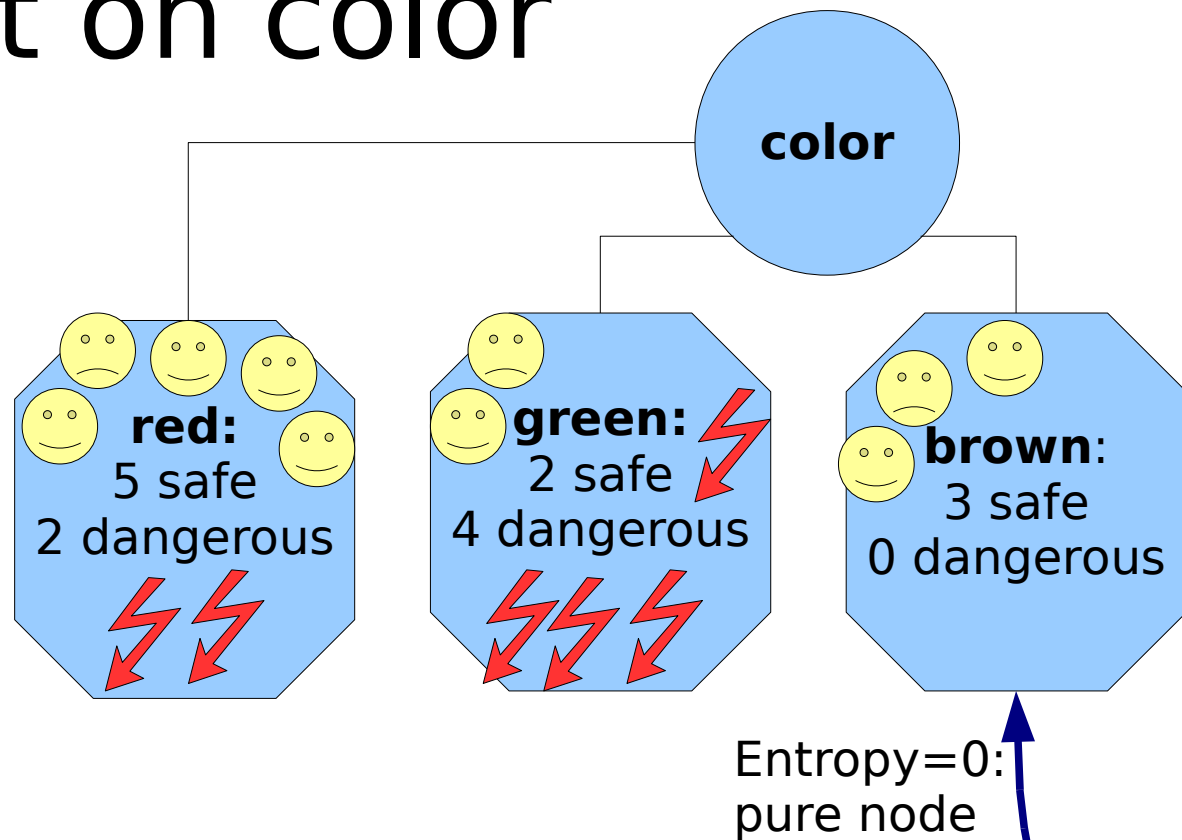


Split on color

color	size	flesh	class
brown	large	hard	safe
green	large	hard	safe
red	large	soft	dangerous
green	large	soft	safe
red	small	hard	safe
red	small	hard	safe
brown	small	hard	safe
green	small	soft	dangerous
green	small	hard	dangerous
red	large	hard	safe
brown	large	soft	safe
green	small	soft	dangerous
red	small	soft	safe
red	large	hard	dangerous
red	small	hard	safe
green	small	hard	dangerous



Entropy for the node [color:red] = $-5/7 \log(5/7) - 2/7 \log(2/7) = 0.28$

Entropy for the node [color:green] = $-2/6 \log(2/6) - 4/6 \log(4/6) = 0.15$

Entropy for the node [color:brown] = $-3/3 \log(3/3) = 0$

Averaged entropy of the split on color attribute = $7/16 * 0.28 + 6/16 * 0.15 = \mathbf{0.17}$