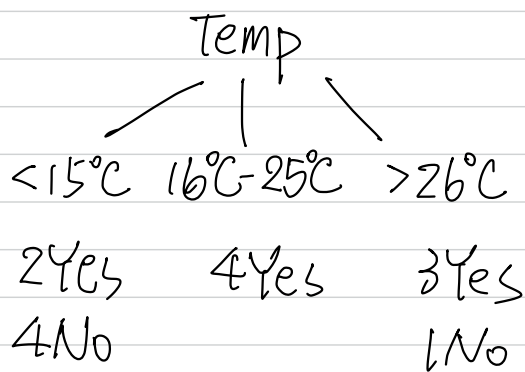


$$K=14$$

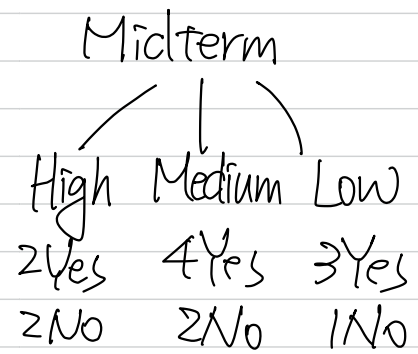


$$\begin{aligned}
 En(<15^\circ\text{C}) &= En\left[\frac{2}{6}, \frac{4}{6}\right] \\
 &= -\frac{2}{6} \log_2 \frac{2}{6} + \frac{4}{6} \log_2 \frac{4}{6} \\
 &= 0.9182
 \end{aligned}$$

$$En(16-25) = 0$$

$$En(>26) = 0.8113$$

$$En(\text{Temp}) = 0.9403$$



$$En(\text{High}) = 1$$

$$En(\text{Mid}) = 0.91813$$

$$En(\text{Low}) = 0.8113$$

$$En(\text{Midterm}) = 0.9403$$

$$\text{Gain}(14, \text{Midterm})$$

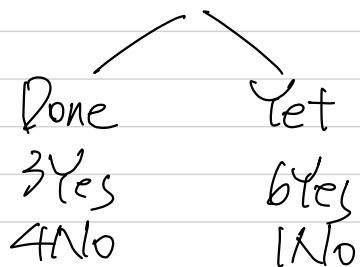
$$= 0.0292$$

$$\text{Gain}(14, \text{Temp})$$

$$= En(\text{Temp}) - \left( \frac{6}{14} \times 0.9183 + \frac{4}{14} \cdot 0 + \frac{4}{14} \cdot 0.8113 \right)$$

$$= 0.3149$$

Homework - done



$$En(Done) = 0.9852$$

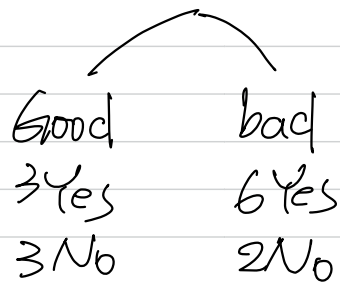
$$En(Yet) = 0.5917$$

$$En(HW) = 0.9403$$

$$Gain(I4, HW) = 0.1519$$

$$\arg\text{Max}(Gain) = Gain(I4, Temp) = 0.9403$$

Quiz



$$En(Good) = 1$$

$$En(bad) = 0.8113$$

$$En(I4, Quiz) = 0.0481$$

