

| | Actual | Predicted |
|---|--------|-----------|
| 1 | Y | N 0.3 Y |
| 2 | Y | Y 0.3 Y |
| 3 | N | N 0.2 Y |
| 4 | N | Y 0.6 Y |
| 5 | Y | Y 0.3 Y |
| 6 | N | N 0.1 N |

recall 100% (100%)
(Y, N, Y, N, Y, N) (Y, N, Y, N, Y, N)

default

① $\geq 50\% \rightarrow P$

$$\text{recall} = \frac{2}{3} \quad \text{precision} = \frac{2}{2+1}$$

recall ↑

② $\geq 15\% \rightarrow P$
(100%) (precision = $\frac{3}{3+2} = \frac{3}{5}$)
recall

precision ↑

③ $\geq 80\% \rightarrow P$

$$(100\%) \quad (\text{recall} = \frac{2}{3})$$

(F1)

$$\text{model ①} \Rightarrow F1 = \frac{2(\frac{2}{3})(\frac{2}{3})}{(\frac{2}{3}) + (\frac{2}{3})}, \frac{2}{3} = 0.6$$

$$\text{model ②} \Rightarrow F1 = \frac{2(\frac{3}{5})(1)}{\frac{3}{5} + 1} = 0.75$$

$$\text{model ③} \Rightarrow F1 = \frac{2(\frac{2}{3})(1)}{\frac{2}{3} + 1} = 0.8 \quad \text{↖ } \text{precision} \quad \text{↗}$$