

7m-class
10/05

① $d = 8$ features

$$\text{iteration } n = 2^d - 1 = 2^8 - 1 = 255$$

$t_i = 0.1 \text{ sec}$ for one iteration

$$\text{total time} = n \times t = 255 \times 0.1$$

$$= 25.5 \text{ sec}$$

② $X = \{a, b, c, d\}$ and $F = \{a, b\}$

a) $F_1 = \{a, b, c\}$, $F_2 = \{a, b, d\}$

b) $F_1 = \{a, b\}$ $F_2 = \{a, b\}$

3) $L < R$ $L=1, R=3$

$$X = \{a, b, c, d\}$$

$$F = \{b, d\}$$

(a)

$$R_2: \{b, d\}$$

$$R_3: \{b, d\} \quad \{b, d\}$$

(b) L_1

4) $Y = \{a, b, f, g\}$ $x = h$

$$\text{Acc}(\{a, b, f, g\}) = 0.89$$

$$\text{Acc}(\{a, b, f, g, h\}) = 0.91$$

(a) $Y = Y + x$

$$= \{a, b, f, g, h\}$$

(b) Find the best feature of $(x)^*$