## 2016302580320-任思远-第五 次作业

## 4.2

$$r_1(\mathbf{X}) = L_{12} \cdot p(\mathbf{X}|w_2) \cdot P(w_2) = 0.18$$
  
 $r_2(\mathbf{X}) = L_{21} \cdot p(\mathbf{X}|w_1) \cdot P(w_1) = 0.04$ 

Thus it is classified as  $w_2$ .

## 4.4

$$egin{aligned} r_1(\pmb{X}) &= L_{12} \cdot p(\pmb{X}|w_2) \cdot P(w_2) = 0.18 \ r_2(\pmb{X}) &= L_{21} \cdot p(\pmb{X}|w_1) \cdot P(w_1) = 0.24 \end{aligned}$$

Thus it is classified as  $w_1$ .