

作业23解答:

1. 计算模式 $ababbbabbbababbbababbbabbb$ 的前缀函数 π 。

假设字母表 $\Sigma = \{a, b\}$ 。

1. 解: $\pi[1] = 0, \pi[2] = 0, \pi[3] = 1, \pi[4] = 2, \pi[5] = 0,$
 $\pi[6] = 1, \pi[7] = 2, \pi[8] = 0, \pi[9] = 1, \pi[10] = 2,$
 $\pi[11] = 3, \pi[12] = 4, \pi[13] = 5, \pi[14] = 6, \pi[15] = 7,$
 $\pi[16] = 3, \pi[17] = 4, \pi[18] = 5, \pi[19] = 6, \pi[20] = 7,$
 $\pi[21] = 8。$

2. 给定模式 $P = 0101101201$ 和字母表 $\Sigma = \{0, 1, 2\}$, 计算函数 λ 和 γ 。

2. 解: $\lambda[0] = 9, \lambda[1] = 10, \lambda[2] = 8。$

$\pi[1] = 0, \pi[2] = 0, \pi[3] = 1, \pi[4] = 2, \pi[5] = 0,$

$\pi[6] = 1, \pi[7] = 2, \pi[8] = 0, \pi[9] = 1, \pi[10] = 2,$

$P' = 1021011010$

$\pi'[1] = 0, \pi'[2] = 0, \pi'[3] = 0, \pi'[4] = 1, \pi'[5] = 2,$

$\pi'[6] = 1, \pi'[7] = 1, \pi'[8] = 2, \pi'[9] = 1, \pi'[10] = 2,$

$\gamma[0] = 8, \gamma[1] = 8, \gamma[2] = 8, \gamma[3] = 8, \gamma[4] = 8,$

$\gamma[5] = 8, \gamma[6] = 8, \gamma[7] = 8, \gamma[8] = 3, \gamma[9] = 3,$

$\gamma[10] = 1。$