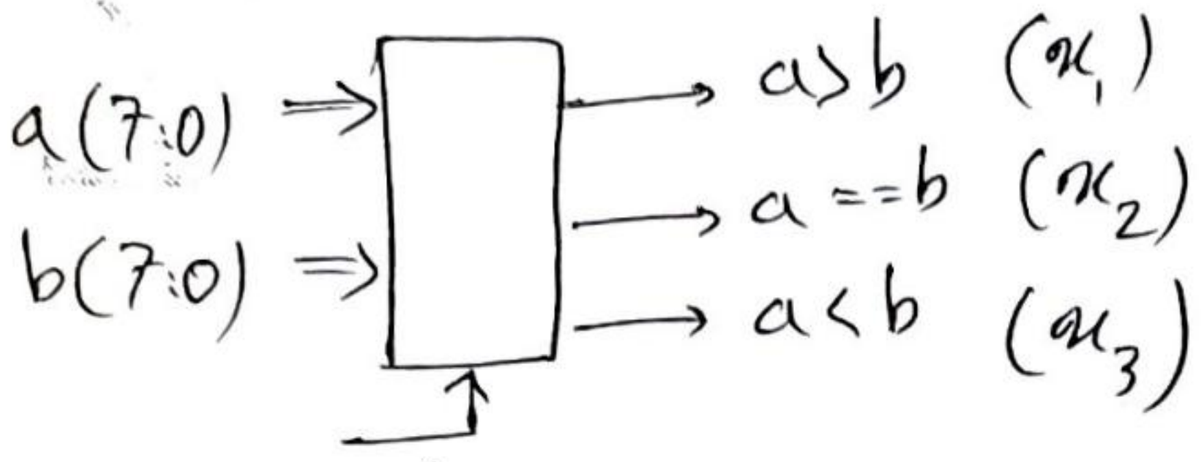


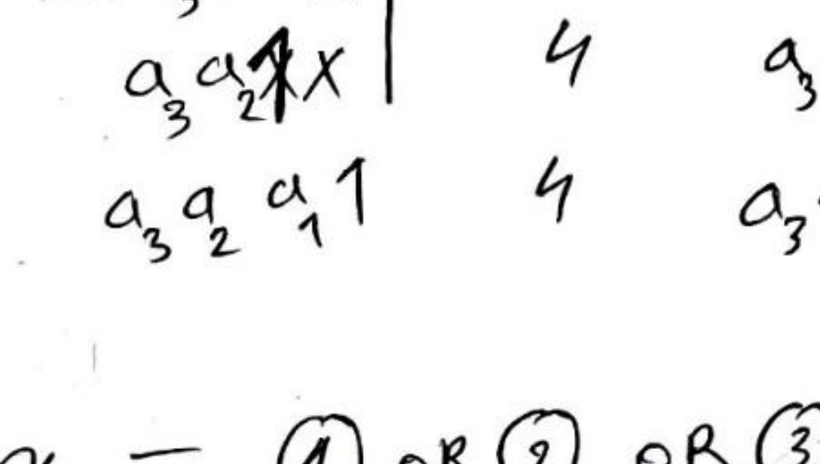
Q.1

a_7-a_4	a_3-a_0	b_7-b_4	b_3-b_0	
1 xxx	xxxx	0 xxx	xxxx	①
a_7 1xx	xxxx	a_7 0xx	xxxx	②
a_7a_6 1x	xxxx	a_7a_6 0x	xxxx	③
$a_7a_6a_5$ 1	xxxx	$a_7a_6a_5$ 0	xxxx	④
$a_7a_6a_5a_4$	1xxx	$a_7a_6a_5a_4$	0xxx	⑤
〃	a_3 1xx	〃	a_3 0xx	⑥
〃	a_3a_2 1x	〃	a_3a_2 0x	⑦
〃	$a_3a_2a_1$ 1	〃	$a_3a_2a_1$ 0	⑧

$(a>b)\,x_1 \equiv$ ① OR ② OR ③ ... OR ⑧

① ≡

② ≡



③

$$\pi_2\,(a==b) \equiv (a_7 b_7) \underset{\&}{\text{AND}} (a_6 b_6) \,\&\, (a_5 b_5) \,\&\, \cdots \,\&\, (a_0 b_0)$$

$\pi_3\,(a<b)$: