

# Digital Image Processing HW1

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Prob 1.

$S_1$	$S_2$
0	0
0	0
...	...
0	1
1	0

(a)  $S_1$  and  $S_2$  are not 4-adjacent

F 因為 1 為對角線, 非  $\begin{array}{|c|c|c|} \hline x & p & x \\ \hline x & p & x \\ \hline \end{array}$

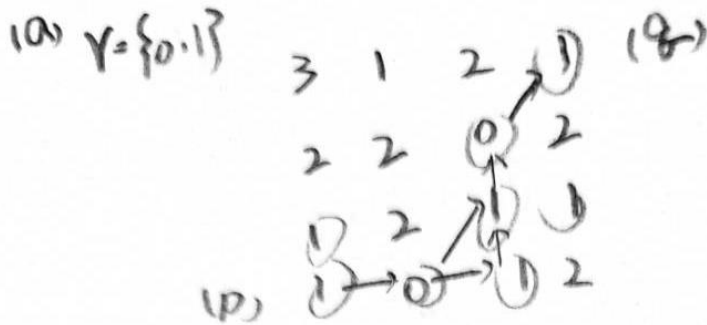
(b)  $S_1$  and  $S_2$  are 8-adjacent

T 因為  $\begin{array}{|c|c|c|} \hline x & p & x \\ \hline x & p & x \\ \hline \end{array}$  is true

(c)  $S_1$  and  $S_2$  are m-adjacent

T 因符合  $\begin{array}{|c|c|c|} \hline x & p & x \\ \hline x & p & x \\ \hline \end{array}$  且  $S_1$  and  $S_2$  not  $N_4$

Prob 2.

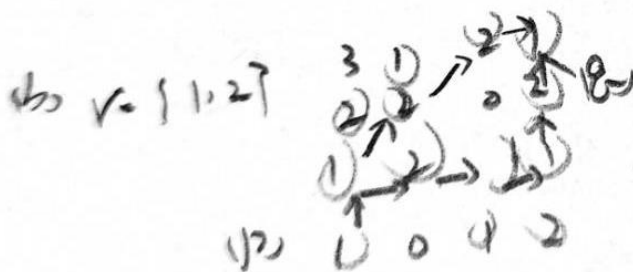


4-path: does not exist, because

無法 4-adjacency ~~path~~

8-path: its length is 4

m-path: its length is 5



4-path: length is 6

8-path: length is 4

m-path: length is 6

