Chapter 2: Exercise

Given the 6 x 6 matrix shown below:

1	0	0	1	3	0
1	2	2	0	3	1
2	1	1	0	1	2
3	1	3	2	1	3
0	2	0	2	0	1
3	2	1	3	3	2

a) Let V={0, 1}. Show the shortest path between the shaded pixels using 4-connectivity, 8-connectivity, and m-connectivity.
b) Compute the Euclidean distance, city-block distance, and chessboard distance between shaded pixels. Assume all pixels are of 1x1 size.