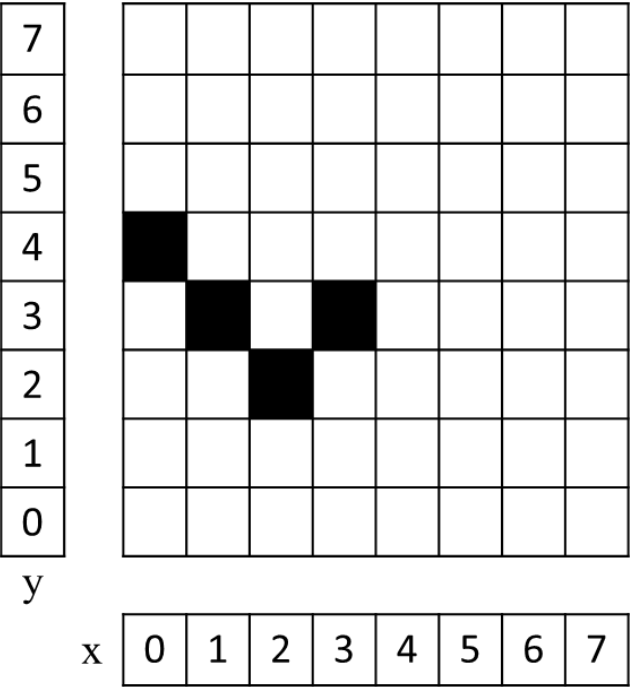


I



- Apply Hough transform for fitting a line to black points in the binary image I.
- a. In the Hough transform, a point  $(x_0, y_0)$  in the  $xy$ -plane is mapped into a curve in the polar  $(d, \theta)$  parameter space. Write down the equation of the curve.
  - b. Fill in the accumulator array H. Identify the accumulator cell receiving the highest number of votes. Write down the equation of the identified line in polar coordinates.

H

	0	1	$\sqrt{2}$	2	$2\sqrt{2}$	3	4	$3\sqrt{2}$
0								
$\pi/4$								
$\pi/2$								
$3\pi/4$								