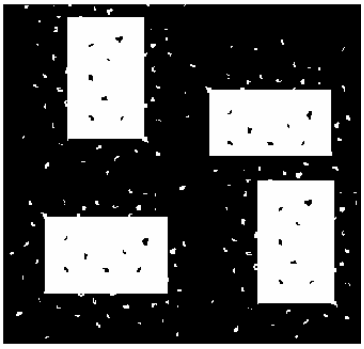
Solution - Quiz # 4
BESE – 14B
Digital Image Processing

4

1. Describe an algorithm to find the size of large boxes in the image below:



Solution (Not Unique)

1. Perform morphological opening and closing to remove the noise.
2. Extract connected components from the image. (e.g. bwlabel)
3. Size of each box may be calculated using the method *regionprops* or by computing the histograms.

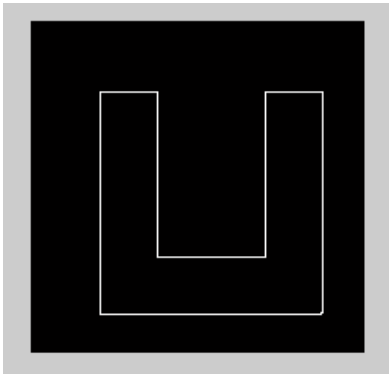
2. Consider the following binary image A:

A

Show the result of applying the following on image A with a 3x3 structuring element S

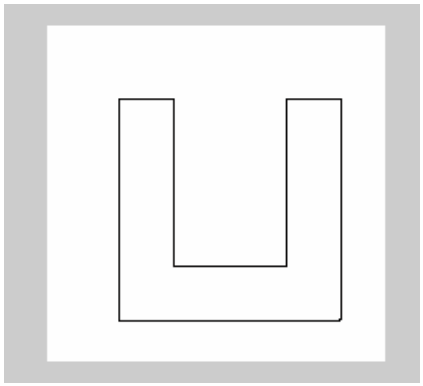
$$B = (A \oplus S) \cap A^c$$

Solution



$$B = (A \Theta S) \cup A^c$$

Solution



$$B = (A \oplus S) \cup A^c$$

Solution

Completely White Image

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