ME192 HW #5 Extra Credit Problem – Due 10/8/14

Perform morphology operations using the source image in Grid 1 and the structural elements A and B.

1. Grid 1 - Dilation of the Grid 0 image using Structural Element A.
2. Grid 2 - Erosion of the Grid 1 image with Element B
3. Grid 3 - Erosion of the Grid 2 image with Element B, followed by

 Subtraction of the resulting erosion from the Grid 2 image.

Either shade or insert character “X” in the element boxes to indicate an inclusion in the set.

**Structural**

**Element**

 *Source Image 🡪 Dilation with A 🡪 Erosion with B 🡪 Edge Extract with B*

B

A

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| . |  |  |  |  |  | . |  | . | . | . | . | . | . | . |  | . | . | . | . | . | . | . |  | . | . | . | . | . | . | . |  |  |  |  |

**3**

**2**

**0**

**1**