電腦視覺 HW9

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1. 作業目標:

1. Roberts operator (threshold: 12)

2. Prewitt edge detector (threshold: 24)

3. Sobel edge detector (threshold: 38)

4. Frei and Chen gradient operator (threshold: 30)

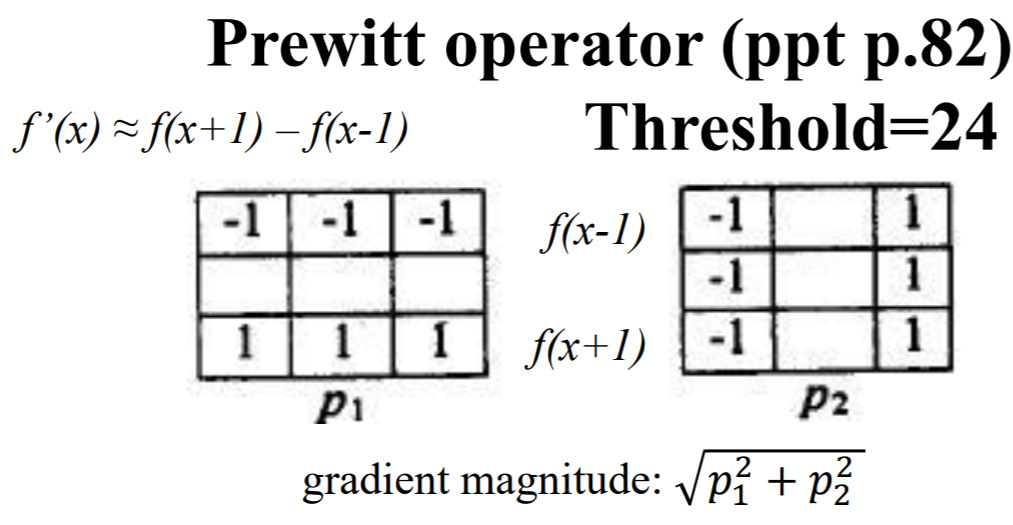
5. Kirsch compass operator (threshold: 135)

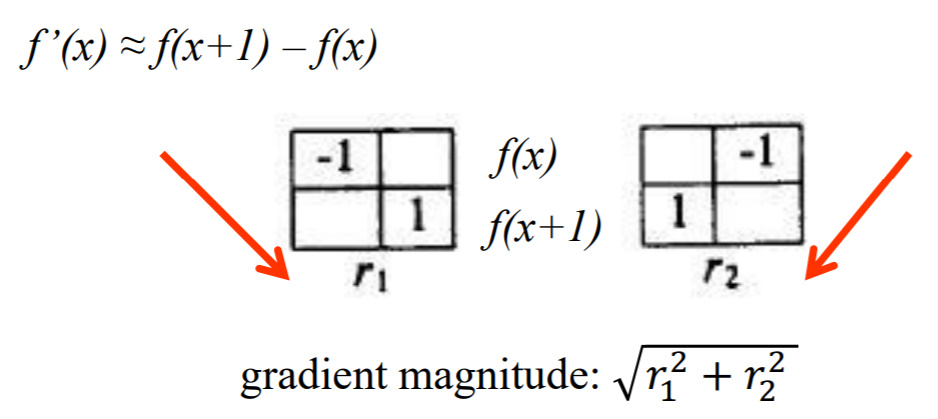
6. Robinson compass operator (threshold: 43)

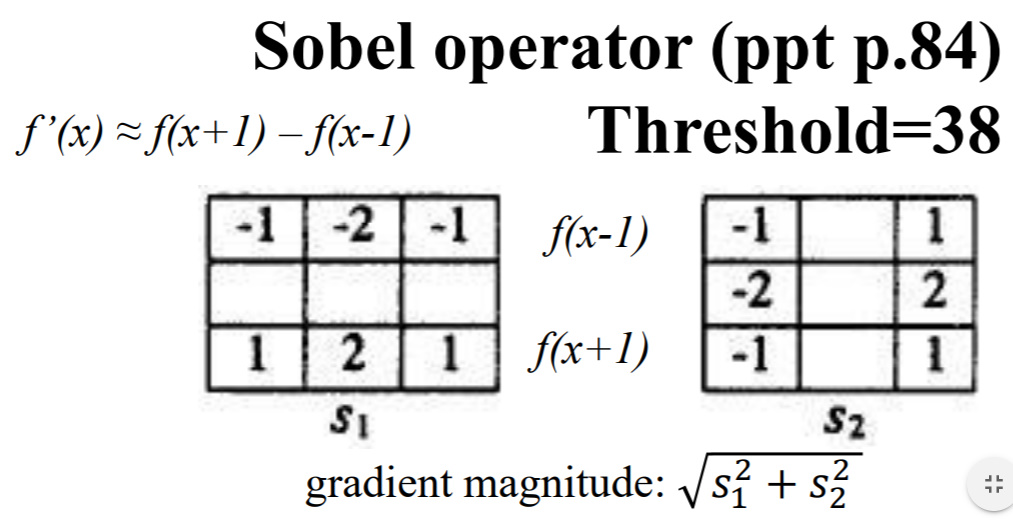
7. Nevatia-Babu 5×5 operator (threshold: 12500)

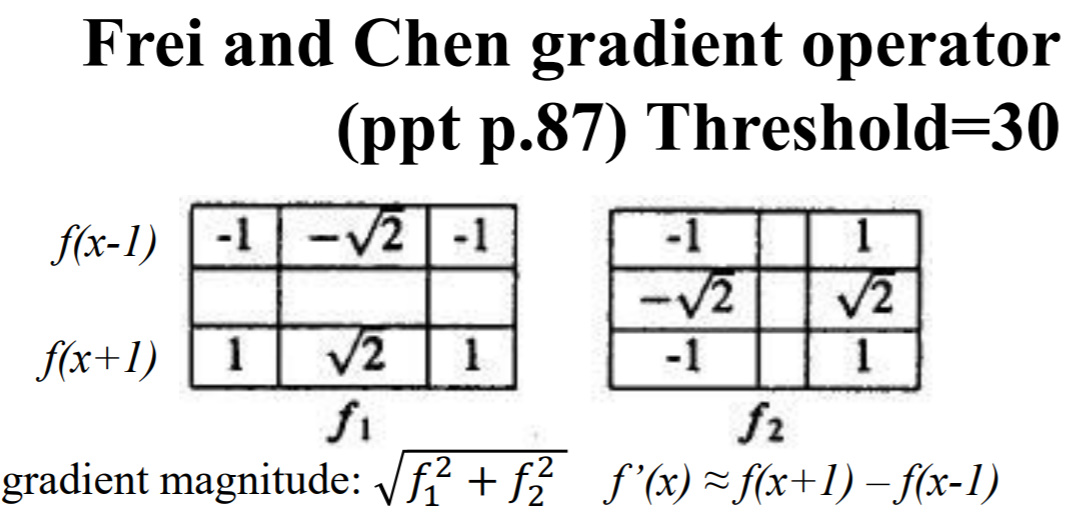
1. 作業流程:
2. 將Lena.bmp做Padding
3. 使用各個方式的kernal進行運算
4. 與threshold比較後輸出邊緣檢測結果影像

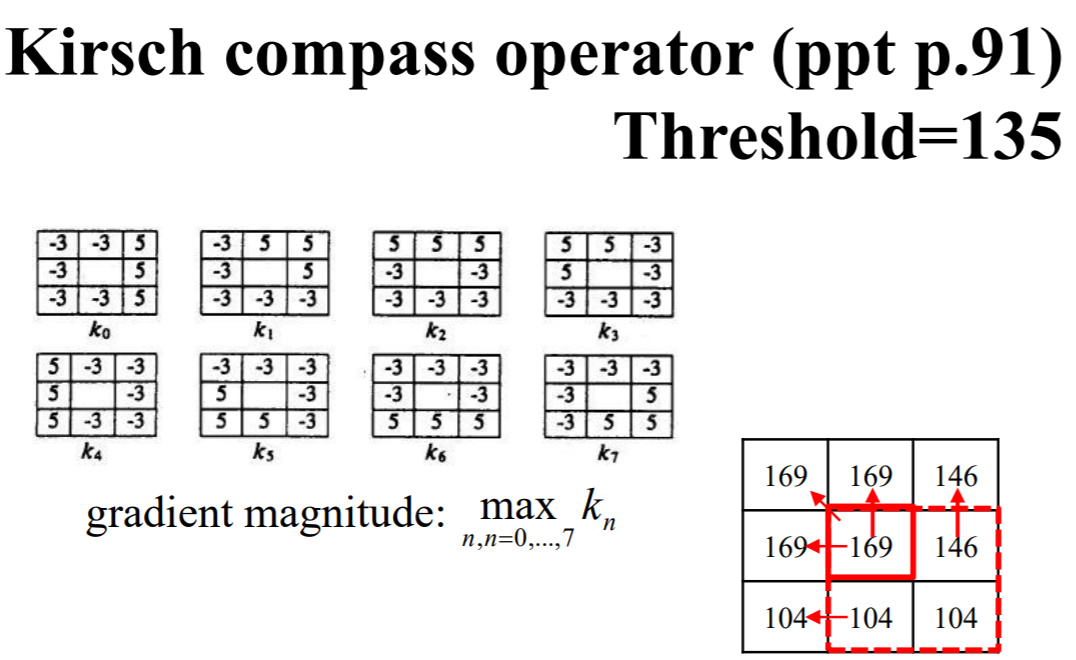
Kernal如下:

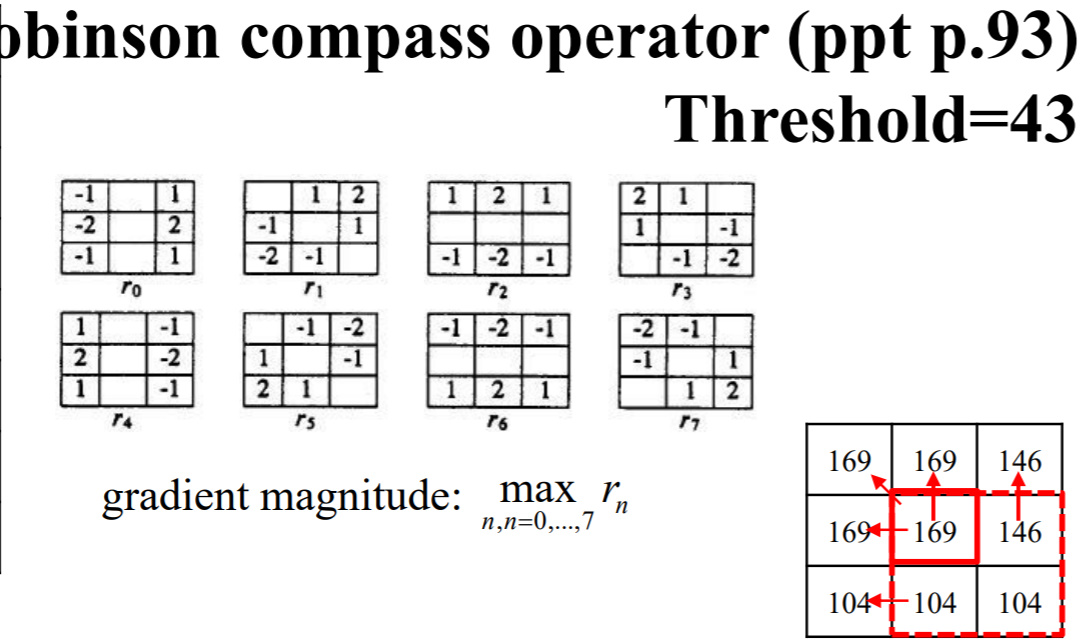


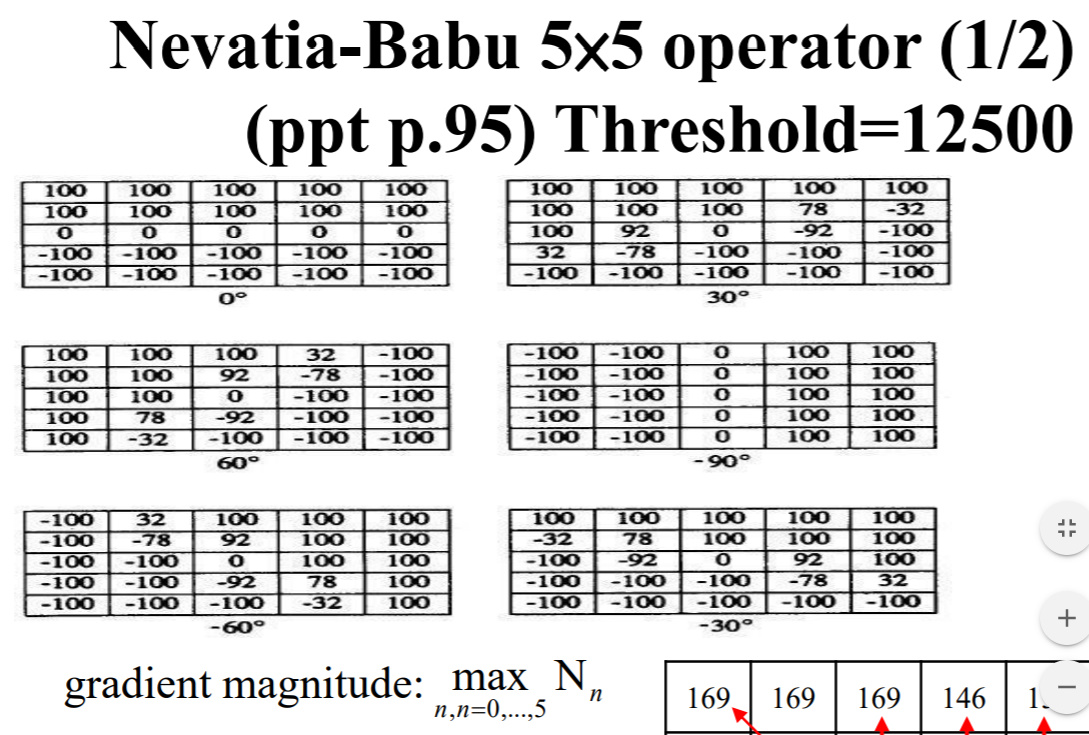












1. 結果:

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| --- | --- | --- |
| Roberts operator  (threshold: 12) | Prewitt edge detector (threshold: 24) | Sobel edge detector (threshold: 38) |
| C:\Users\showt\AppData\Local\Microsoft\Windows\INetCache\Content.Word\Robert_t12_img.bmp |  |  |

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| --- | --- | --- |
| Frei and Chen gradient operator (threshold: 30) | Kirsch compass operator (threshold: 135) | Robinson compass operator (threshold: 43) |
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| Nevatia-Babu 5×5 operator  (threshold: 12500) |
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1. Code fragment(為排版沒依照順序):

