**IP: Project 10: Morphology (CPP)**

**Steven Yu**

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Algorithm Steps:

step 0: Open all files

( numRowsImg, numColsImg, minImg, maxImg ) 🡨 get from inFile\_1

( numRowsStrctElem, numColsStrctElem, minStrctElem, maxStrctElem ) 🡨 get from inFile\_2

( rowOrigin, colOrigin) 🡨 get from inFile\_2

step 1: computeFrameSize(…)

step 2: - dynamically allocate imgAry with extra rows and extra columns

- loadImage (…)

- zeroFrameImg (…)

- consolePrettyPrint (imgAry)

- dynamically allocate morphAry with extra rows and extra columns

step 3:

- dynamically allocate structElemAry

- loadstruct (…)

- consolePrettyPrint (structElemAry)

step 4: initMorphAry(…)

choice 🡨 consoleRequest (…)

Use case statement for the given choice

case ‘D’ : call dilation

case ‘E’ : call erosion

case ‘O’ : call opening

case ‘C’ : call closing

case ‘Q’ : exit the program

step 5: consolePrettyPrint (morphAry)

outFilePrettyPrint (morphAry)

step 6: Repeat step 4 to step 5 until choice is Q

step 7: Close all files