**CSC IP (381): Project #12 <Morphology>(C++)**

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**Algorithm Steps for the implementation for this project:**

step 0: open input1 and process header info

open input2 and process header info and origin

step 1: computeFrameSize

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

- loadImage // load input file to imgAry

- zeroFrame

- prettyPrint (imgAry) // pretty print imgAry to the \*console\* with "Input Image"

- dynamically allocate morphAry with extra rows and extra columns

step 3: - dynamically allocate structElem array

- loadstruct // load input2 file to structElem array

- prettyPring (structElem)// pretty print to the \*console\* with "Structuring Element"

step 4: call delation // see your lecture note

- prettyPrint (morphAry) // pretty print to the \*console\* with "Delation Result"

- outPutResult //write the delation result to output1

step 5: call erosion // see your lecture note

- prettyPrint (morphAry) // pretty print to the \*console\* with "Erosion Result"

- outPutResult //write the erosion result to output2

step 6: call closing // By call those two morphological ops one after the other

- prettyPrint (morphAry) // pretty print to the \*console\* with "Closing Result"

- outPutResult //write the closing result to output3

step 7: call opening // By call those two morphological ops one after the other

- prettyPrint (morphAry) // pretty print to the \*console\* with "Opening Result"

- outPutResult //write the opening result to output4

step 8: close all files