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| **Application/ Program name:** | L3-2 |
| **Written by:** | Bailey Nichols |

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| **Purpose or problem definition:** |
| The program will demonstrate the use of stacks and Queues by making a program that converts a text file of infix operations into post fix operations. |
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| **Program Procedures:** |
| The program will use the formula demonstrated in the YouTube video (seen in notes) combined with the header files given in the text to covert infix operations to post-fix operations as demonstrated in notes. |
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| **Algorithm/Processing/Conditions:** |
| **Inputs:** |
| Text file with infix operations in it. |
| **Processes:** |
| \*The program will intake the infix operations from the file  \*make a string with those operations in postfix notation  \*Output that string to console |
| **Outputs:** |
| Outputs text to console. |
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| **Notes & Restriction:** |
| Infix notation  (a+b) \* c  Postfix notation  abc+\*  mystack.h Reference  Malik, D.S.. C++ Programming Programming Design Including Data Structures (MindTap Course List) (p. 1184). Cengage Learning Kindle Edition  infixToPostFix.h Reference  Malik, D.S.. C++ Programming Programming Design Including Data Structures (MindTap Course List) (p. 1184). Cengage Learning Kindle Edition  YouTube Reference  mycodeschool, “Infix to Postfix Using Stack”, Data Structures Series, Youtube, Dec 8, 2013, <https://www.youtube.com/watch?v=vq-nUF0G4fI> |
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| **Comments:** |
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