



Facultad de Estudios Superiores

Acatlán

AUTONOMOUS UNIVERSITY OF MEXICO

**BACHELOR'S DEGREE IN APPLIED MATHEMATICS AND
COMPUTER SCIENCE**

FINAL PROJECT

**CALCULATOR FOR CONVERTING INFIX OPERATIONS TO
PREFIX AND POSTFIX USING LETTERS AND NUMBERS**

SUBJECT: DATA STRUCTURES

GROUP: 1301

STUDENTS:

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PROJECT REQUIREMENTS

GENERAL REQUIREMENTS:

1. PROGRAM A CALCULATOR IN C. EVERYTHING IN ENGLISH.
2. ASK THE USER FOR THE OPERATION TO PERFORM.
3. USE THE HEADER FILES:
 - Stack.h / stack.c
 - list.h / list.c
 - dlist.h / dlist.c
 - queue.h / queue.c
4. SEGMENTED IN PARTS, FORBIDDEN TO HAVE EVERYTHING IN A SINGLE FILE.
5. DISPLAY STEP BY STEP THE OPERATIONS IN THE STACK TABLE.
6. POST AND PREFIX USING LETTERS WITH VERIFICATION.
7. DETECT WHEN THE OPERATION HAS INCORRECT SYNTAX ERROR.
8. ACCEPT NUMBERS AND SOLVE THEM.
 - POST WITH VERIFICATION
 - PRE WITH VERIFICATION
9. ARGUMENTS: SAVE THE RESULT IN A FILE WITH ALL STEPS AND OPERATIONS, ADD HELP.
10. OPERATIONS.
11. POSTFIX, INFIX AND PREFIX.
12. PROVIDE STEP BY STEP VERIFICATION:
 - PREFIX: +# # USING TRAVERSALS
 - INFIX: #+#
 - POSTFIX: ##+
13. ADD HELP.
14. MUST PRESERVE THIS PREVIOUS ORDER.