

Bonus Work 1
Due Date: June 6, 2025 (By the End of Class)
Individual Effort.

Complete Solution is equal to 1% points in Total Course Score.

Based on the conversion of NFA to DFA, make a complete program in C++ or Python, that does the following:

- Asks the user to provide the input file that contains a(n) DFA, NFA, or E-NFA. Use the same input format from the lab work for input file.
- The program should determine (itself) if the input given in DFA, NFA, or E-NFA.
- The program should then provide a Minimized DFA for any given input.
 - o Ensure that if the input is incomplete, has errors, or is not a proper DFA, NFA, or E-NFA, then the program should indicate it with an error.
- You can assume, that the program is given a single input file at a time.
- You can display the Minimized DFA Transition table on the console, rather than in an output file.
- What to submit:
 - o The code file,
 - o Your Code should have a license (Do some research on GPL and other variants. Pick which suits you best)
 - o Use Doxygen to generate the documentation for your code.
 - o Submit a Zip file with naming format of: ID_NAME.zip
 - File should contain the code file named **Bonus1** at the root of zip.