Iteration 3 Report
EECE 2140: Computing Fundamentals for Engineers

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November 5, 2025

GitHub Link: https://github.com/mosseggs/EECE2140_Final_Project

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1 Summary of Team Progress and Development Updates

Our goals for this iteration was to make a truth table generator and a string to boolean converter. For the truth table generator, the user will be prompted on the amount of variables they want in their table, then they will be prompted to enter 0 or 1 for each of the outputs. Then the neatly presented table will be printed. We plan on a boolean expression to be printed for this function as well. For the string to boolean converter, the user can user letters such as A, B, C and D for the variables, and words such as AND, OR, and XOR to make a boolean equation. We are working on when the user inputs the boolean equation, a truth table will be printed.

2 Implemented Core Features

- **Truth Table generator:** Generates a truth table based on amount of variables and the outputs given by the user. Instance methods named getvariablecount and addvariables were used to get the amount of variables from the user when prompted for the amount. addvariables was used when the amount of variables exceeded 26. Then generatetable and displaytable was used to generate and display the table. The user is prompted on the output results in generatetable.
- **String to Boolean:** This converts the string into a boolean expression. Later to be used to generate a truth table. Methods such as subphrases, reverse, and getanswers verifies and converts the expression for it to be used later, making sure that the equation is formated correctly and only using the AND, OR, etc. that is allowed. The method parse will print a truth table from the boolean expression.

3 Challenges and Resolutions

- **Challenge 1:** Parenthesis in boolean expressions, affected the outputted logic system **Resolution:** Turning parenthesis into sub-phrases
- **Challenge 2:** Some equations resulting in the phrase being split into two sections with uneven sets of answers **Resolution:** Iterating through both lists

4 Leadership Rotation and Team Contributions

Leadership Summary

Week/Span	Leader	Responsibilities	
Lteration 3	Gabriel Lau	Maintained cohesion with the different code made by the team	

Individual Contributions

Team Member	Contributions (Technical / Documentation)	Hours
Juan Ipina	Truth table generator, asking user for amount of variables, asking user for outputs based on variable amount, printing table	10 hrs
Gabriel Lau	String to boolean functions, used to print a table from the equation and later on to be used in generating equation from user input.	10 hrs

Statement by the Individual Submitter

I, **Juan Ipina**, confirm that the above table accurately reflects my personal contributions during Iteration 3.