PROJECT 3 USER MANUAL

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Binary Calculator User Manual

1. Introduction

The Binary Calculator program allows users to perform addition and multiplication operations on 4-bit binary numbers. This manual provides instructions on how to use the Binary Calculator program efficiently.

2. Executing the Program

To use the Binary Calculator program:

1. **Starting the Program: ** Run the `Project3_driver.exe` file in your preferred C++ development environment.
2. **Operation Selection: ** You will be prompted to choose between addition (+) and multiplication (*) operations.
3. **Input Binary Numbers: ** Enter two 4-bit binary numbers for the selected operation.

3. Program Operation

- **Menu Display: ** The program displays a menu where you can choose between addition and multiplication operations.
- **Operation Confirmation: ** After choosing an operation, the program confirms the selected operation.
- **Input Binary Numbers: ** Enter the first and second 4-bit binary numbers for the operation.
- **Performing Operation: ** The program performs the selected operation on the entered binary numbers and displays the result.

4. User Interactions

- **Choosing Operation: ** Enter '+' for addition or '*' for multiplication.
- **Binary Input: ** Enter two 4-bit binary numbers when prompted. Invalid inputs will not require re-entry and will display an erroneous result.
- **Exit Program: ** Respond 'y' or 'Y' to exit the program. Respond 'n' or 'N' to continue using the program.

5. Example Usage

- Select the operation: Enter '+' for addition or '*' for multiplication.
- Enter the first 4-bit binary number when prompted.
- Enter the second 4-bit binary number when prompted.
- View the result of the operation.

6. Important Notes

- **Valid Inputs: ** Ensure that binary inputs are 4-bit numbers containing only '0' and '1'.
- **Continuous Usage: ** The program allows users to perform multiple operations until choosing to exit.
- **Exiting the Program: ** Respond 'y' or 'Y' when asked to leave the program.

7. Troubleshooting

- **Invalid Inputs: ** The program will not prompt for re-entry if an invalid input is entered and, in such case, will output an erroneous result. Future updated version will fix and test this case.
- **Exiting the Program: ** Confirm the program exit by responding 'y' or 'Y' when prompted.
