5. Boolean Calculator (1) Create a program that functions as a simple boolean calculator for 32-bit integers. It should display a menu that asks the user to make a selection from the following list:

1. x AND y

2. x OR y

3. NOT x

4. x XOR y

5. Exit program

When the user makes a choice, call a procedure that displays the name of the operation about to be performed. You must implement this procedure using the Table-Driven Selection technique, shown in Section 6.5.4. (You will implement the operations in Exercise 6.) (The Irvine32 library is required for this solution program.)

6. Boolean Calculator (2) Continue the solution program from Exercise 5 by implementing the following procedures:

• AND\_op: Prompt the user for two hexadecimal integers. AND them together and display the result in hexadecimal.

• OR\_op: Prompt the user for two hexadecimal integers. OR them together and display the result in hexadecimal.

• NOT\_op: Prompt the user for a hexadecimal integer. NOT the integer and display the result in hexadecimal.

• XOR\_op: Prompt the user for two hexadecimal integers. Exclusive-OR them together and display the result in hexadecimal. (The Irvine32 library is required for this solution program.)