```
[▶▶ ~/Desktop/Folders/University of Windsor/Fall 2024/COMP-2650/Labs/Lab03/lab03_mandal5 $ vi main.c
[▶▶ ~/Desktop/Folders/University of Windsor/Fall 2024/COMP-2650/Labs/Lab03/lab03_mandal5 $ cc main.c -o main
[▶▶ ~/Desktop/Folders/University of Windsor/Fall 2024/COMP-2650/Labs/Lab03/lab03_mandal5 $ ./main
Enter the command number:
        0) Exit
        1) AND
        2) OR
        3) NOT
        4) 1's complement
        5) 2's complement
        6) 2's complement*
Choose: 1

Enter the first binary number:
x0 = 3
Error: Please enter 0 or 1 only.

x0 = 1
x1 = 0
x2 = 1
x3 = 1
x4 = 0
x5 = 0
x6 = 1
x7 = 0

Enter the second binary number:
y0 = -1
Error: Please enter 0 or 1 only.

y0 = 1
y1 = 1
y2 = 0
y3 = 0
y4 = 1
y5 = 0
y6 = 1
y7 = 1

Result of AND operation:
10000010
```

```
Enter the command number:
        0) Exit
        1) AND
        2) OR
        3) NOT
        4) 1's complement
        5) 2's complement
        6) 2's complement*
Choose: 2

Enter the first binary number:
x0 = 0
x1 = x
Error: Please enter 0 or 1 only.

x1 = 0
x2 = 0
x3 = 0
x4 = 0
x5 = 0
x6 = 0
x7 = 0

Enter the second binary number:
y0 = 1
y1 = y
Error: Please enter 0 or 1 only.

y1 = 1
y2 = 1
y3 = 1
y4 = 1
y5 = 1
y6 = 1
y7 = 1

Result of OR operation:
11111111
```

```
Enter the command number:
        0) Exit
        1) AND
        2) OR
        3) NOT
        4) 1's complement
        5) 2's complement
        6) 2's complement*
Choose: 3

Enter the binary number:
x0 = 1
x1 = 0
x2 = -13
Error: Please enter 0 or 1 only.

x2 = 1
x3 = 1
x4 = 0
x5 = 0
x6 = 1
x7 = 0

Result of NOT operation:
01001101
```

```
Enter the command number:
        0) Exit
        1) AND
        2) OR
        3) NOT
        4) 1's complement
        5) 2's complement
        6) 2's complement*
Choose: 4

Enter the binary number:
x0 = 0
x1 = 1
x2 = 0
x3 = 1com
Error: Please enter 0 or 1 only.

x3 = 1
x4 = 1
x5 = 0
x6 = 1
x7 = 1

Result of 1's complement operation:
10100100
```

```
Enter the command number:
        0) Exit
        1) AND
        2) OR
        3) NOT
        4) 1's complement
        5) 2's complement
        6) 2's complement*
Choose: 5

Enter the binary number:
x0 = 0
x1 = 0
x2 = 0
x3 = 0
x4 = -2 com
Error: Please enter 0 or 1 only.

x4 = 0
x5 = 0
x6 = 0
x7 = 0

Result of 2's complement operation:
00000000

Enter the command number:
        0) Exit
        1) AND
        2) OR
        3) NOT
        4) 1's complement
        5) 2's complement
        6) 2's complement*
Choose: 5

Enter the binary number:
x0 = 1
x1 = 1
x2 = 1
x3 = 1
x4 = 1
x5 = 00
Error: Please enter 0 or 1 only.

x5 = 1
x6 = 1
x7 = 1

Result of 2's complement operation:
00000001
```

```
Enter the command number:
        0) Exit
        1) AND
        2) OR
        3) NOT
        4) 1's complement
        5) 2's complement
        6) 2's complement*
Choose: 6

Enter the binary number:
x0 = 0
x1 = 0
x2 = 0
x3 = 0
x4 = 0
x5 = 0
x6 = -2 com
Error: Please enter 0 or 1 only.

x6 = 0
x7 = 0
Result of 2's complement* operation:
00000000

Enter the command number:
        0) Exit
        1) AND
        2) OR
        3) NOT
        4) 1's complement
        5) 2's complement
        6) 2's complement*
Choose: 6

Enter the binary number:
x0 = 1
x1 = 1
x2 = 1
x3 = 1
x4 = 1
x5 = 1
x6 = 1
x7 = 00
Error: Please enter 0 or 1 only.

x7 = 1
Result of 2's complement* operation:
00000001
```

```
Enter the command number:
        0) Exit
        1) AND
        2) OR
        3) NOT
        4) 1's complement
        5) 2's complement
        6) 2's complement*
Choose: exit
Error: Invalid input. Please enter 0, 1, 2, 3, 4, 5, or 6.

Enter the command number:
        0) Exit
        1) AND
        2) OR
        3) NOT
        4) 1's complement
        5) 2's complement
        6) 2's complement*
Choose: 0
Exiting...

▶▶ ~/Desktop/Folders/University of Windsor/Fall 2024/COMP-2650/Labs/Lab03/lab03_mandal5 $ _
```