

```
1 using System;
2
3 namespace LogicalOperations
4 {
5     internal class Program
6     {
7         static void Main(string[] args)
8         {
9
10             Console.ForegroundColor = ConsoleColor.Blue;
11             Console.WriteLine
12                 ("=====");
13             Console.WriteLine("Hi, This program was written by Mohamad
14                 Saleh Hajkarami");
15             Console.WriteLine("This program performs logical operations:
16                 AND, OR, XOR");
17             Console.WriteLine
18                 ("=====");
19             Console.ResetColor();
20
21             while (true)
22             {
23                 try
24                 {
25
26                     Console.WriteLine("Please enter the first boolean value
27                         (true/false):");
28                     string input1 = Console.ReadLine();
29                     bool val1 = bool.Parse(input1.ToLower());
30
31                     Console.WriteLine("Please enter the second boolean
32                         value (true/false):");
33                     string input2 = Console.ReadLine();
34                     bool val2 = bool.Parse(input2.ToLower());
35
36                     bool andResult = val1 && val2;
37                     bool orResult = val1 || val2;
38                     bool xorResult = val1 ^ val2;
39
40                     Console.ForegroundColor = ConsoleColor.Green;
41                     Console.WriteLine($"AND result (val1 AND val2):
42                         {andResult}");
43                     Console.WriteLine($"OR result (val1 OR val2):
44                         {orResult}");
45                     Console.WriteLine($"XOR result (val1 XOR val2):
46                         {xorResult}");
47                     Console.ResetColor();
48                 }
49                 catch { }
50             }
51         }
52     }
53 }
```

```
41         break;
42     }
43     catch (FormatException)
44     {
45         Console.ForegroundColor = ConsoleColor.Red;
46         Console.WriteLine("Invalid input! Please enter 'true' or 'false'.");
47         Console.ResetColor();
48         Console.WriteLine("Let's try again...");
49     }
50 }
51
52
53 Console.ForegroundColor = ConsoleColor.Green;
54 Console.WriteLine
55     ("=====");
56 Console.WriteLine("Thank you for using this program!");
57 Console.WriteLine
58     ("=====");
59 Console.ResetColor();
60 }
61 }
```