IT 483
Lab _01 _C# Programming

Main topics: Boolean expressions
If statements
If-else statements.

Exercise

This lab is designed to give you practice converting a Java code into a C# code and convert an if-else-if statement into nested if statements.

Getting Started To start this exercise, you should:

1. Read the Java code below, Convert the Java code into a C# code then convert an if-else-if statement into nested if statements.

Lab01.java

```
import java.util.Scanner;

public class Lab01
{
  public static void main(String[] args)
  {
    Scanner stdIn = new Scanner(System.in);

    //
    System.out.println("CS 201 Restaurant Guide\n");

    String response;
    char s, f;
    boolean spicy, fancy;

    // Ask user for his/her preference
    System.out.print("Do you like spicy food? (y / n) : ");
    // Get the next token
    response = stdIn.next();
    // Look only at first character
    s = response.charAt(0);
    if (s == 'y' || s == 'Y')
      spicy = true;
    else
      spicy = false;

    // Ask user for his/her preference
    System.out.print("Do you want to go to a fancy restaurant? (y / n) : ");
```

```
    // Get the next token
    response = stdIn.next();
    // Look only at first character
    f = response.charAt(0);
    fancy = (f == 'y') || (f == 'Y');

    // Make suggestion
    if (spicy && fancy)
      System.out.println("I suggest you go to Thai Garden Palace.");
    else if (!spicy && !fancy)
      System.out.println("I suggest you go to Joe's Diner.");
    else if (spicy && !fancy)
      System.out.println("I suggest you go to Alberto's Tacqueria.");
    else if (!spicy && fancy)
      System.out.println("I suggest you go to Chez Paris.");

    stdIn.close();
  }
}
```

Problem Description

1. Read through the given code (Lab01.java) then convert the Java code into a C# code
2. This program suggests restaurants based on a user's preferences for spiciness and fanciness. Notice that the yes / no answers are converted to `boolean` results in two different ways, **are they equivalent and why**?
3. Note: there is a chain of if-else-if statements which selects and outputs the program's suggestion, based on the user's preferences.
4. Your task is to convert this chain of if-else-if statements into a pair of nested if-else statements. Your new code will look something like this:

```
if ( <condition1> )
{
  if ( <condition2> )
  {
    Console.WriteLine( ...
  }
  else // means if ( !<condition2> )
  {
    Console.WriteLine( ...
  }
}
else // means if ( !<condition1> )
{
  if ( <condition3> )
  {
    Console.WriteLine( ...
  }
  else // means if ( !<condition3> )
```

```
  {
    Console.WriteLine( ...
  }
}
```

Note: the conditions are numbered for identification only, this does not imply that they are all unique.

5. Indicate which (if any) of the above `if`s or `else`s above really need to be written in *block* form. Feel free to omit the *block*s where they are not needed, in your code.
6. Once you have written your pair of nested if-else statements:
   (a) Make sure that your programs compile and run without errors or warnings.
   (b) Run your program enough times to check all the choices for correctness.