Logical Operations from Mathematics in C# Explained

The following are the logical operations that are used in c# most of the times.

- Less than: a < b
- Less than or equal to: a <= b
- Greater than: a > b
- Greater than or equal to: a >= b
- Equal to a == b
- Not Equal to: a != b

You can use the above operations in your decision making statements. Now we are going to look at how C# uses logical operators to perform a logical operation between two operands like AND, OR and NOT based on the requirements specified by the user.

Remember that with the logical operation C# returns a Boolean (true or false) based on the logic.

For example:
From the assignment say our user's salary was sal=R1500. Therefore the logical operation sal>2000 is going to return false. Why? Or if age=67 the age>50 returns true.

Below is what we call Truth Table In Mathematics

Operator	Name	Descriptions	Example	Results
&&	Logical AND	Returns true if both operands are true and NON zero	If (age>50)=true && b(sal<2000)=true	True
			If (age>50)=false && b(sal<2000)=true	False
			If (age>50)=false && b(sal<2000)=true	False
			If (age>50)=false && b(sal<2000)=false	false
||	Logical OR	Returns true If at least ONE of the operands are true	If (age>50)=true || b(sal<2000)=true	True
			If (age>50)=false || b(sal<2000)=true	True
			If (age>50)=true || b(sal<2000)=false	True
			If (age>50)=false ||b(sal<2000)=false	False
!	Logical Not	Returns the reverse of the logical state.	If (age>50)=false ||b(sal<2000)=false	True
			If (age>50)=true ||b(sal<2000)=false	False

			If (age>50)=false && b(sal<2000)=true	True
			If (age>50)=true && b(sal<2000)=true	False

Quick question??

What is the equivalent statement of If(age>minAge && sal<maxSal)??