

Exercise 1: Computing an Expression using Logic

In this exercise, you are required to implement the logical operators such as not, xor, boolean and, boolean NOT to compute the result

WE'LL COVER THE FOLLOWING ^

- Problem Statement
- Coding Exercise

Problem Statement

There's always some logic in whatever we do, whether it seems like that or not. This time, we are going to give you the logic and all you need to do is implement it. The challenge is to create the expression explained below and find what result it gives!

Coding Exercise

The first step is done for you, which is the method. The method takes in two variables and computes a logical expression using them. For explanation's sake, the parameters are called `x` and `y`.

Now you must do the following:

- Find the **Boolean NOT** of `x`
- **Boolean XOR** this with `x` itself
- Find the **Boolean AND** of this answer with `y`
- Return the **Boolean NOT** of the entire expression

Only write the code where instructed in the snippet below. The **return** statement and the **variable** to be returned are already mentioned for you.

Important Note: Since we are returning `true` by default in the code

below when you run the code without writing the solution it will still

pass *two* of our test cases. However, your code needs to pass **ALL four** of our test cases in order to be considered correct.

Good Luck!

```
class challenge_two{  
  
    public static bool logic(bool x, bool y){  
  
        bool answer = false;  
  
        //Write your code below this  
        //Hint: You can make extra variables if need be  
  
        //Comment the statement below once you have written your code  
        return answer;  
  
        //Uncomment the statement below once you have written your code  
        //return answer;  
  
    }  
}
```

