Solution Review: Compute an Expression Using Logic

In this review, the solution of the challenge 'Compute an expression using logic' from the previous lesson is provided.

We'll cover the following

- Solution: Is it true or false?
- Understanding the code

Solution: Is it true or false?

```
class HelloWorld {
    public static void main( String args[] ) {
        boolean x = true;
        boolean y = true;
        boolean answer;

        boolean not_x = !x;
        boolean xor_x = not_x ^ x;
        boolean and_xy = xor_x && y;
        answer = !and_xy;

        System.out.println(answer);
    }
}
```

Understanding the code

Line 7

- The variable, `not_x` stores the result of the **Boolean NOT** of *x*.
- The value of `x` is **true**. Hence, it stores a value of *false* in the example above

Line 8

- The variable `xor_x` stores the result of the **Boolean XOR** of *x* with **not_x**.
- Hence, it stores a value of *true* as the **XOR** of *true* with *false* is **true**.

Line 9

- The variable, `and_xy` stores the result of the **Boolean AND** of *y* with **xor_x**.
- Hence, it stores a value of *true* as the **AND** of *true* with *true* is **true**.

Line 10

- This stores the result of the **Boolean NOT** of **and_xy**.
- Hence, it stores a value of *true* as the **NOT** of *true* is **false**.

Let's go through a *quick quiz* to test your understanding.