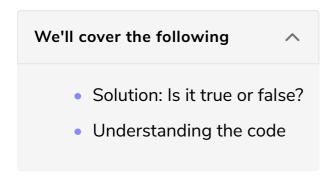
Solution Review: Compute an Expression Using Logic

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



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, $not \times x$ stores the result of the **Boolean NOT** of x.
- The value of \mathbf{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.