1 **Logical Branching 1**

Submitted on Today at 9:21 AM

```
long x = 10;
long y = x - 4;
boolean answer = y >= 6;
```

Does `answer` evaluate to true or false?

- (•) true
- ( ) false

✓ Correct RESET INPUT CHECK ANSWER

▼ HIDE EXPLANATION

x

10

y

6

answer

true

2 **Logical Branching 2**

Submitted on Today at 9:25 AM

```
int x = 7;
int y = x % 2;
boolean answer = y >= 3;
```

7 % 2 => 1

1 >= 3 => false

Does `answer` evaluate to true or false?

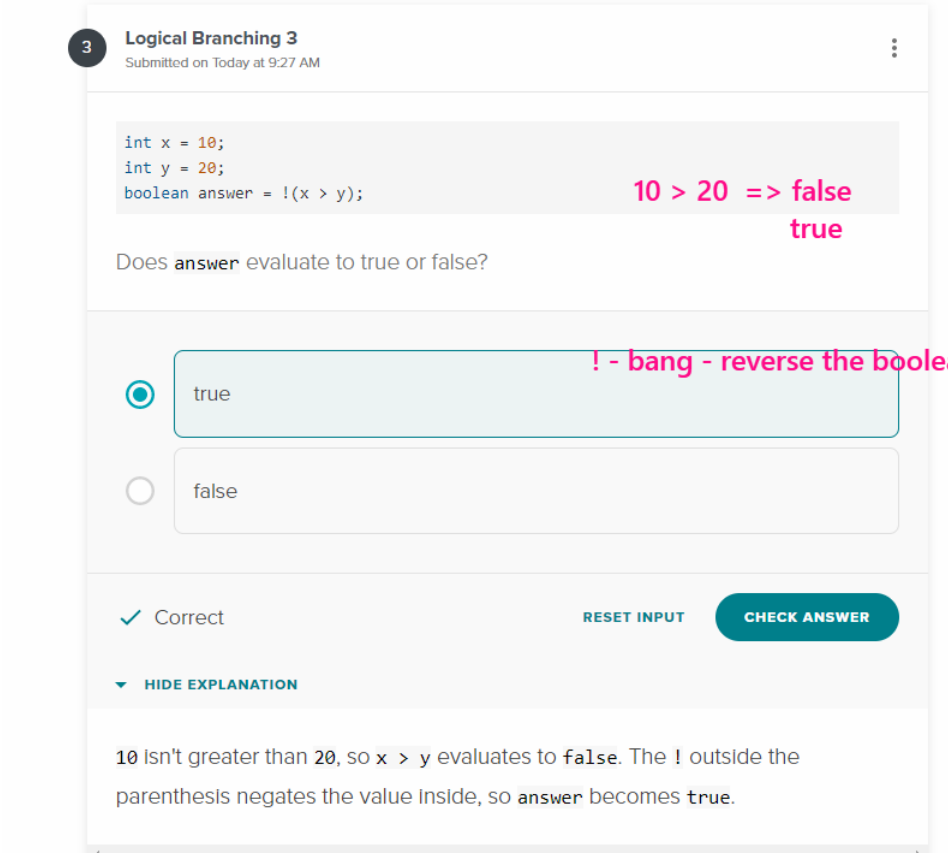
- ( ) true
- (•) false

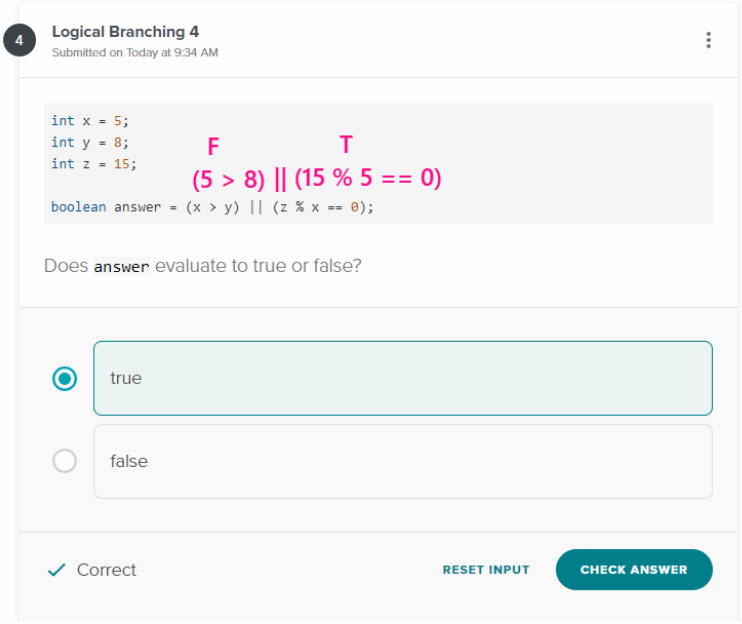
✓ Correct RESET INPUT CHECK ANSWER

x = 7

y = 1

answer = false





|| - OR -- pipes - if either side is T whole expression is true

&& if either is F whole exp is false

^ - one side T and one side F whole exp is true

```java
/* Exercise 51
51. Bill and Jill are house painters. Bill can paint a standard room in 2.15 hours, while Jill ave
1.90 hours. How long will it take the two painters working together to paint 5 standard rooms?
Hint: Calculate the rate at which each painter can complete a room (rooms / hour), combine those r
and then divide the total number of rooms to be painted by the combined rate.
*/

// bill can paint 1 room in 2.15 hours, how much of a room can he paint in 1 hour
int oneRoom = 1;
double billRate = 2.15;
double jillRate = 1.90;
double billRoomsPerHour = oneRoom / billRate;
double jillRoomsPerHour = oneRoom / jillRate;
double combinedRoomsPerHour = billRoomsPerHour + jillRoomsPerHour;
int totalRooms = 5;
double combinedRate = totalRooms / combinedRoomsPerHour;
```