Less Than & Less Than or Equal To

Less Than

The `<` operator is used to check if one value is less than another value.

```java
int a = 5;
int b = 7;
System.out.println(a < b);
```

```
true
```

What happens if you:
- Change `b` to `1`?
- Change `b` to `5`?
- Change `b` to `false`?

```
true
```

Less Than or Equal To

The `<=` operator is used to check if one value is less than or equal to another value.

```java
int a = 5;
int b = 7;
System.out.println(a <= b;)
```

```
true
```

What happens if you:

- Change `b` to `1`?
- Change `b` to `5`?
- Change `a` to `false` and `b` to `true`?

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```
true
```

Equating to True

Which of the following conditions would cause the expression `a <= b` to equate to true?

Hint: there is more than one correct answer.

If `a` is less than `b`

If `a` is less than and equal to `b`

If `a` is equal to `b`

If `a` is greater than `b`

There are two conditions that would case `a <= b` to be true. One is if `a` is less than `b` and the other is `a` is equal to `b`.

As long as one of those conditions is true, then `a <= b` will be true.