

## coursera

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## **Comparison Operators**

In Python, we can use comparison operators to compare values. When a comparison is made, Python returns a boolean result, or simply a True or False.

- To check if two values are the same, we can use the equality operator: ==
- To check if two values are not the same, we can use the not equals operator: !=

We can also check if values are greater than or lesser than each other using > and <. If you try to compare data types that aren't compatible, like checking if a string is greater than an integer, Python will throw a **TypeError**.

We can make very complex comparisons by joining statements together using logical operators with our comparison operators. These logical operators are **and**, **or**, and **not**. When using the **and** operator, both sides of the statement being evaluated must be true for the whole statement to be true. When using the **or** operator, if either side of the comparison is true, then the whole statement is true. Lastly, the **not** operator simply inverts the value of the statement immediately following it. So if a statement evaluates to True, and we put the **not** operator in front of it, it would become False.

