**Python** **Booleans**

* **Boolean values**
* **Evaluate values and variables**
* **Most values are true**
* **Some values are false**
* **Functions can return a Boolean**
* Booleans represent one of two values: True or False.
* In programming you often need to know if an expression is True or False.
* You can evaluate any expression in Python, and get one of two answers, True or False.
* When you compare two values, the expression is evaluated and Python returns the Boolean answer.
* When you run a condition in an if statement, Python returns True or False.
* Print a message based on whether the condition is True or False.
* The bool() function allows you to evaluate any value, and give you True or False in return.
* Almost any value is evaluated to True if it has some sort of content.
* Any string is True, except empty strings.
* Any number is True, except 0.
* Any list, tuple, set, and dictionary are True, except empty ones.
* In fact, there are not many values that evaluate to False, except empty values, such as (), [], {}, "", the number 0, and the value None.
* And of course the value False evaluates to False.
* One more value, or object in this case, evaluates to False, and that is if you have an object that is made from a class with a \_\_len\_\_ function that returns 0 or False:
* You can create functions that returns a Boolean Value.
* You can execute code based on the Boolean answer of a function.
* Print "YES!" if the function returns True, otherwise print "NO!".
* Python also has many built-in functions that return a boolean value, like the isinstance() function, which can be used to determine if an object is of a certain data type.