

## Report on python

Booleans:

- Booleans represent one of two values they are true , false.
- To evaluate any expression in Python we get one of two answers either true or false.
- When we compare two values, the expression is evaluated and then Python returns the Boolean answer.
- When we run a condition in an if statement, Python returns true or false.
- It can evaluate the string and a number. Any string is true, except empty strings. Almost any value is evaluated to true, if it has some sort of content.
- Any number is true, except 0.
- Any list, tuple, set, and dictionary are true, except empty ones.
- There are not many values that evaluates to False, except empty values, such as (),[],{ }, "", the number 0, and the value none, and the value False evaluates to False.
- The bool() function allows you to evaluate any value, and give you true or false in return,

Eg: 1. `print(10 > 9)`                      Output : True

`print(10 == 9)`                      False

`print(10 < 9)`                      False

2. a = 200

Output: b is not greater than a

b = 33

if b > a:

print("b is greater than a")

else:

print("b is not greater than a")

Functions that can returns a Boolean Value:

- Python also has many built-in functions that returns a Boolean value, like the isinstance() function, which can be used to determine if an object is of a certain data type.
- The bool() method is used to return or convert a value to a Boolean value that is True or False, using the standard truth testing procedure.
- Syntax : bool([x])
- Eg:

1. def myFunction() :

Output: True

return True

print(myFunction())

2. x = 200

Output: True

print(isinstance(x, int))

3. class myclass():

Output: False

def \_\_len\_\_(self):

return 0

myobj = myclass()

print(bool(myobj))