

1.What are the two values of the Boolean data type? How do you write them?

there are 2 values of boolean data type i.e., True or False

We can write them by using conditions assigning them to variables and if the condition is true it will return true same as with false condition.

2. What are the three different types of Boolean operators?

AND,OR,NOT

3. Make a list of each Boolean operator's truth tables (i.e. every possible combination of Boolean values for the operator and what it evaluate).

AND TABLE

A	B	A&B
T	T	T
T	F	F
F	T	F
F	F	F

OR TABLE

A	B	AorB
T	T	T
T	F	T
F	T	T
F	F	F

NOT TABLE

A	NOTA
T	F
F	T

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) FALSE

not (5 > 4) FALSE

(5 > 4) or (3 == 5) TRUE

not ((5 > 4) or (3 == 5)) FALSE

(True and True) and (True == False) FALSE

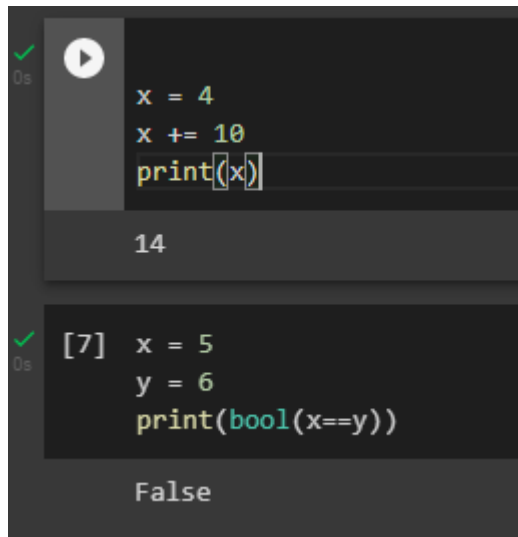
(not False) or (not True) TRUE

5. What are the six comparison operators?

1. less than <
2. greater than >
3. less than or equal to <=
4. greater than or equal to >=
5. equal to ==
6. Not equal to !=

6. How do you tell the difference between the equal to and assignment operators? Describe a condition and when you would use one.

the simple diff b/w equal to and assignment operators are we assign values to variables in python equal to is represented as (==) use for checking boolean types where as assignment operator we assign value(=) to perform whether or mathematical or string operators.



```
x = 4
x += 10
print(x)
```

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```
[7] x = 5
    y = 6
    print(bool(x==y))
```

False

7. Identify the three blocks in this code:

```
spam = 0
```

```
if spam == 10:
```

```
    print('eggs') block 1
```

```
if spam > 5:
```

```
    print('bacon')
```

```
else:
```

```
    print('ham')
```

```
    print('spam') block 2
```

```
    print('spam') block 3
```

8. Write code that prints Hello if 1 is stored in spam, prints Howdy if 2 is stored in spam, and prints Greetings! if anything else is stored in spam.

```
a = int(input("enter number"))
if a == 1:
    print('Hello')
elif a == 2:
    print('Howdy')
else :
    print('Greetings!')
```

enter number1
Hello

```
a = int(input("enter number"))
if a == 1:
    print('Hello')
elif a == 2:
    print('Howdy')
else :
    print('Greetings!')
```

enter number2
Howdy

```
a = int(input("enter number"))
if a == 1:
    print('Hello')
elif a == 2:
    print('Howdy')
else :
    print('Greetings!')
```

enter number97
Greetings!

9.If your programme is stuck in an endless loop, what keys you'll press?

To stop endless loop in python 'CTRL+C' is used.

10. How can you tell the difference between break and continue?

Break statement will end up in the innermost loop if it is used within a nested loop. While using the continue statement the loops do not terminate but continuously go on with the next iteration

11. In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?

for i in range(10) ----- it will print 0 to 10

for i in range(0,10) ----- it will print 0 to 9

for i in range (0,10,1) ----- it will print 0 to 9 and steps into 1 each step.

12. Write a short program that prints the numbers 1 to 10 using a for loop. Then write an equivalent program that prints the numbers 1 to 10 using a while loop.

```
for i in range (1,11):
```

```
    print(i)
```

```
i = 1
while i < 11:
    print(i)
    i += 1
```

13. If you had a function named bacon() inside a module named spam, how would you call it after importing spam?

```
import spam
```

```
spam.bacon()
```