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

Boolean data type values are

True – If the conditions are met it gives true ( 1) value

False - If conditions are not met it shows false (0 ) value.

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

=

<

>

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 ).

False \* AND False

True False AND False

True True AND True

True \* OR True

False True OR True

False False OR False

False -- NOT True

True – Not False

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) = False

5. What are the six comparison operators?

+ Addition Adds values on either side of the operator. a + b = 30

- Subtraction Subtracts right hand operand from left hand operand. a – b = -10

\* Multiplication Multiplies values on either side of the operator a \* b = 200

/ Division Divides left hand operand by right hand operand b / a = 2

% Modulus Divides left hand operand by right hand operand and returns remainder b % a = 0

\*\* Exponent Performs exponential (power) calculation on operators a\*\*b =10 to the power 20

// Floor Division - The division of operands where the result is the quotient in which the digits after the decimal point are removed. But if one of the operands is negative, the result is floored, i.e., rounded away from zero (towards negative infinity) − 9//2 = 4 and 9.0//2.0 = 4.0, -11//3 = -4, -11.0//3 = -4.0

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

Operator Example Equivalent to

%= x %= 5 x = x % 5

//= x //= 5 x = x // 5

\*\*= x \*\*= 5 x = x \*\* 5

&= x &= 5 x = x & 5

7. Identify the three blocks in this code:

spam = 0

1.[if spam == 10:

print('eggs')]

2.[if spam > 5:

print('bacon')]

3.[else:

print('ham')]

print('spam')

print('spam')

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.

1.[if spam == 1:

print('Hello')]

2.[if spam ==2:

print('Howdy')]

3.[else:

print('Greetings!')]

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

CTRL + C

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

Example: Python break

# Program to show the use of break statement inside loop

for val in "string":

if val == "i":

break

print(val)

print("The end")

**Output:**

s

t

r

the end

In this program, we iterate through the "string" sequence. We check if the letter is "i", upon which we break from the loop. Hence, we see in our output that all the letters up till "i" gets printed. After that, the loop terminates.

Python continue

# Program to show

# the use of continue

# statement inside loops

for val in "string":

if val == "i":

continue

print(val)

print("The end")

Output:

s

t

r

n

g

the end

This program is same as the above example except the break statement has been replaced with continue. We continue with the loop, if the string is "i", not executing the rest of the block. Hence, we see in our output that all the letters except "i" gets printed.

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):

print(i, end =" ")

print()

output=0,1,2,3,4,5,6,7,8,9

for i in range(0,10):

print(i, end =" ")

print()

output=0,1,2,3,4,5,6,7,8,9

for i in range(0,10,2):

print(i, end =" ")

print()

output=0,2,4,6,8

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, end =" ")

print()

output= 1 2 3 4 5 6 7 8 9 10

i=0

while(i<=9):

i+=1

print(i)

Output =

1

2

3

4

5

6

7

8

9

10

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

Class spam:

Def bacon()

From spam import bacon