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

The two values of Boolean data types are – True, False

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

AND, OR, NOT are the three different Boolean operations

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 ).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| X | Y | NOT X | X AND Y | X OR Y |
| False | False | True | False | False |
| False | True | True | False | True |
| True | False | False | False | True |
| True | True | False | True | True |

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?

less than ( < ), less than or equal to ( <= ), greater than ( > ), greater than or equal to ( >= ), equal to ( == ), and not equal to ( != ) are the 6 comparison operators

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

Equal to is used for comparing two values. It returns 1 if both the values are equal otherwise returns 0.

Condition – When we want to check if any two variables or values are same or not

Eg – if a==b:

print(“a and b have equal values”)

Assignment operator is used for assigning the value to a variable.

Condition – When we want to assign a value to a variable

Eg –

A=5

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

print('spam')

print('spam')

As spam =0 so 1st and 2nd condition will not be satisfied and the output will be –

Ham

spam

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.

spam=input(“Enter the value of spam”)

if spam==1:

print(“Hello”)

elif spam ==2:

print(“Howdy”)

else:

print(“Greetings!”)

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

Ctrl+z

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

break is used when we want to break out of the look

continue is used when we want to continue the loop

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

No difference all three will give the same output

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=i+1

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

The function can be called with spam.bacon().