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

The two values are 0 and 1, written as False and True respectively.

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

And, Or, Not are the three 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 ).

T or T = T T and F = F T not T = F

T or F = T T and T = T T not F = F

F or T = T F and F = F F not T = F

F or F = F F and T = F F not F = T

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) 🡪 0

not (5 > 4) 🡪 0

(5 > 4) or (3 == 5) 🡪 1

not ((5 > 4) or (3 == 5)) 🡪 0

(True and True) and (True == False) 🡪 0

(not False) or (not True) 🡪 1

5. What are the six comparison operators?

<, >, <=, >=, !=, == are the six comparison opeartors.

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 operator is used to compare the value and is denoted by ‘==’.

Assignment operator is used to assign a value to the variable and is denoted by ‘=’.

Example: a = 10

if a==10:

print(‘entered value is 10’)

else:

print(‘entered value is not 10’)

7. Identify the three blocks in this code:

spam = 0

if spam == 10: First block

print('eggs')

if spam > 5: Second block

print('bacon')

else: Third block

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.

spam = int(input(‘Enter 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 + C to cancel execution , Ctrl + D to end execution.

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

Break keyword terminates the execution of the function in a loop after the mentioned condition is met and transfers the execution to next loop.

Continue keyword just skips the current iteration and executes the very next iteration in the loop.

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

range() function is defined by start, stop and step.

range(10) generates sequence of integer values from 0 to 9 and excludes 10. As start is not defined it by default starts from 0.

range(0,10) generates sequence of integers from start 0 to end 9 and excludes 10.

range(0,10,1) generates sequence of integers from start 0 with increment of 1 in each iteration till 9 and excludes 10.

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 loop:

for i in range(1,11):

print(i)

While loop:

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?

from spam import bacon