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

True and False

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

Three types are 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 ( inp 1, inp 2 -> op)

0 0 0

0 1 0

1 0 0

1 1 1

OR ( inp 1, inp 2 -> op)

0 0 0

0 1 1

1 0 1

1 1 1

NOT ( inp 1, inp 2 -> op)

0 1

1 0

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?

== equal to

!= not equal to

>= greater than or equal to

<= lesser than or equal to

> Greater than

< lesser than

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

A == B or A == 2 gives a True or False expression as an answer

While

A= 2 means we are assigning 2 to A. A is assigned a value 2.

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')

three blocks,

there are two **if** blocks and one **else** block

the final answer is

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.

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

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

Break when used inside a if condition “breaks” the loop and goes to outer loop, while the continue keeps working on the inner loop as long as the condition is True.

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

All of them are the same.

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?

spam.bacon()