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

Ans = True and false always T and F always capital with rest of the word in lowercase

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

ans = 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 ).

True and True = True

True and False = False

False and False = False

False and True = 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) = True

5. What are the six comparison operators?

Ans == , != , < ,> ,<= ,>=

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

== is the equal to operator that compares two values and evaluates to a boolean

while = is the assignment operator that stores a value in a variable

A condition is an expression used in a flow control statement that evaluates to boolean values

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')

Ans = The three blocks are everything inside the if statement and the lines print('bacon') and print('ham')

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

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.

if <spam> == 1:

print('Hello')

elif <spam> == 2:

print('Howdy')

else:

print('Greeting!')

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

Ans = Press CTRL-C to stop a program stuck in an infinite loop.

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

Ans = The break statement will move the execution outside and just after a loop. The continue statement will move the execution to the start of the loop.

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

Ans = They all do the same thing. The range(10) call ranges from 0 up to (but not including) 10, range(0, 10) explicitly tells the loop to start at 0, and range(0, 10, 1) explicitly tells the loop to increase the variable by 1 on each iteration

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.

Ans =   
for i in range(1, 11):

print(i)

and:

i = 1

while i <= 10:

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?

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