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

TRUE, FALSE – 1,0 in binary

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

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 ).

OR – Compares 1st and 2nd operand if any one operand is 1, then its 1

AND – Compares 1st and 2nd operand if both are 1 then its 1 if not its 0

NOT – Exact opposite of the values

XOR – Compares 1st and 2nd operand if only any one operand is 1 then its 1, If both operand is 1 then its 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?

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

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

== is an assignment operator used for comparison

= declares the value for the variable

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')

Indentation error after if and else condition

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? Tab

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

**Break – Goes out of the loop to the next loop**

**Continue – Returns back 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)?

Range(10) – Upto 10

Range(0,10) – Starts from 0 and ends in 10, But here the value is same as range(10)

Range(0,10,1) – 0 is the start value, 10 is the end value, 1 is the jump value, But here the value is same as range(10) and range(0,10,1)

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=0

while i<=9:

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?

Spam.bacon()