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

1. True

2.False

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

-> AND, OR and NOT are three types of 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 ).

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

-> ">" greater than

-> "!=" not equal to

-> "<=" less than or equal to

-> ">=" greater than or equal to

-> "<=" less than or equal to

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

The equal to is “==” is used to compare between two values which can return a True or False value

On the other hand the assignment operator “=” is used to assign a value to a variable

Equal to example –

If 10 == 15:

Print(“its working”)

assignment operator -

X = 10

Y = 12

7. Identify the three blocks in this code:

spam = 0

->in the above block integer 0 in assigned to a variable named spam

if spam == 10:

print('eggs')

->in the above block there is a if-else statement in which if spam == 10 it will print out eggs.

if spam > 5:

print('bacon')

else:

print('ham')

print('spam')

print('spam')

->in the above block if spam > 5 is true it will print bacon or else the else block will execute.

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” is used to get out of an endless loop in most command line environment

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

The break statement is used to exit and get out of the loop immediately.

And continue statement is used to skip the current iteration of the loop and get into the next iteration.

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

-> range(10) will generate a sequence from 0 to 9 a total of 10 numbers

-> range(0,10) will generate a sequence from 0 to 9 a total of 10 numbers

-> range(0,10,1) will generate a sequence from 0 to 9 but with a step of one.

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 x in range(1,11):

print(x)

x = 1

while x <11:

print(x)

x = x+1

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

Import spam

Becon = spam.becon()