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

True and False. We write the as 0 or 1.

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

AND, OR and 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 is True.

True and False is False.

False and True is False.

False and False is False.

True or True is True.

True or False is True.

False or True is True.

False or False is False.

not True is False.

not False is True.

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?

1. Equal to (==)
2. Not equal to (!= or <>)
3. Greater than (>)
4. Less than (<)
5. Greater than or equal to (>=)
6. 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.

Equal to (==) operator compares whether two values are equal or not. Assignment (=) operator assigns value to a variable.

Example: d = 60 assigns a value 60 to the variable d whereas 5 == 5 compares the value of two variables.

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs')

------ Block 1

if spam > 5:

print('bacon')

------- Block 2

else:

print('ham')

print('spam')

print('spam')

------ Block 3

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.

def spam(x):

if x == 1:

print("Hello")

elif x == 2:

print("Howdy")

else:

print("Greetings!")

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

Restart Kernel or Ctrl+C

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

Break statement breaks or stops the loop whereas continue statement will start over the loop.

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

a. range(10) – call range from 0 to 9.

b. range(0,10) – call range starting from 0 to 9.

c. range(0,10,1) – call range starting from 0 till 10 with an increment of 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.

Using for loop:

for i in range(1,11):

print(i)

Using while loop:

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?

Spam.bacon()