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

There are two Boolean data types: True and False

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

-Comparison operator

-Binary boolean operator

-Not operator

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 ).

Comparison operator check whether given mathematical condition is True or not

* 3>=5 False
* 3<=5 True

Binary boolean operator gives True for integer 1 and non empty string, gives False for 0 and empty string

* Bool(0) False
* Bool(1) True
* Bool(“”) False
* Bool(“ajs”) 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?

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

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 which is used when we need to assign a value to a variable

e.g. hey=10, hey is a variable with value 10 assigned

== is an equal to operator which is used to compare values

e.g. B==5 gives boolean output based on the condition

7. Identify the three blocks in this code:

spam = 0 **|||**

if spam == 10: **block 1**

print('eggs') **|||**

if spam > 5: **|||**

print('bacon')

else: **Block 2**

print('ham') **|||**

print('spam') **||| Block 3**

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(“Greetings!”)

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

Simply interupt the kernel from the options in jupyter notebook or double press i

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

Break will end the current loop and get out of the loop

Continue will throw the cursor to the next iteration of the current loop

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

Range(10) by default give values from 0 to 10, excluding 10 with step size 1 so no difference in the above three.

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)

a=1

while a<=10:

print(a)

a+=1

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

Import spam

Spam.bacon()