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

True and False

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 ).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Inputs | | Truth Table Outputs | | | | | |
| A | B | AND | NAND | OR | NOR | EX-OR | EX-NOR |
| 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 |

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) : TRUE

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?

>, <, >=, <=, ===, and !==

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

Equal is ==

Assignment is =

If a ==5:

a = a+5

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')

1st block is if spam == 10:

2nd block is if spam > 5:

3rd block is else:

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?

: I can press stop kernel

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

: The main difference between break and continue is that break is used for immediate termination of loop. On the other hand, 'continue' terminate the current iteration and resumes the control to the next iteration of the loop

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

All are same

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 (10):

print(i+1)

i =1

while i <11:

print(i)

i +=1

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

Import spam

Bacon = spam.bacon()