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

→ TRUE or FALSE 1==1 its true 2<1 its 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 ).

→

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **NOT = X** | **X’** | **AND = X Y** | **X \* Y** | **OR = X Y** | **X + Y** |
| 0 | 1 | 0 0 | 0 | 0 0 | 0 |
| 1 | 0 | 0 1 | 0 | 0 1 | 1 |
|  |  | 1 0 | 0 | 1 0 | 1 |
|  |  | 1 1 | 1 | 1 1 | 1 |

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) → TRUE

not (5 > 4) → TRUE

(5 > 4) or (3 == 5) → TRUE

not ((5 > 4) or (3 == 5)) → FALSE

(True and True) and (True == False) → 0

(not False) or (not True) → 1

5. What are the six comparison operators?

→less than(<) , less than or equal to(<=) , greater than(>) , greater than or equal to(>=) , equal to (==) , not equal (!=)

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

→The “=” is an assignment operator is used to assign the value on the right to the variable on the left The ‘==’ operator checks wether the two given operands are equal or not

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon') →1

else:

print('ham') →2

print('spam') →3

print('spam') →4

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.

→ spam = input()

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

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

→Break is used to terminate the loop and continue is used to continue the next iteration in the loop

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

→ input = 1

While input <=10:

Print (input)

Input + = 1

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

→ spam. bacon()