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

TRUE

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 ).

AND OR NOT

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Input A | Input B | Output C |  | Input A | Input B | Output C |  | Input A | Output C |
| 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 1 |
| 0 | 1 | 0 |  | 0 | 1 | 1 |  | 1 | 0 |
| 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) - 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.

When we want to compare the values of 2 variable we would use (==) operator but when we want to assign a value to a variable then we are going to use the assignment (=) operator

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')

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

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

Break – It breaks out of the current loop

Continue – It skips the next lines of code and goes back to the loop condition

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

There is no difference

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 num in range(1, 11):

print(num)

num = 1

while(num <= 10):

print(num)

num += 1

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

Spam.bacon()