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 ).

and truth table: or truth table not truth table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| x | y | res | x | y | res | X | res |
| 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.

= will be used to assign a value to a variable.

+= will be used to update the value of a variable

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.

Spam = int(input(“enter the value”))

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 or ctrl+D

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

Break will stops the current iteration and comes out from the loop.

Continue will stop the current iteration and come to next iteration

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 I in range(1,11):

Print(i)

C = 0

While True:

If c>= 11:

Break

C+=1

Print(c)

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

Spam.bacon() #ref: module.function\_name()