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 and 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 | AND | Result |
| True | False | False |
| True | True | True |

|  |  |  |
| --- | --- | --- |
| OR | OR | Result |
| True | False | True |
| False | True | True |
| False | False | False |
| True | True | True |

|  |  |
| --- | --- |
| NOT | Result |
| False | False |
| False | 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?

== Equal

!= Not equal

> Greater than

< Less than

>= Greater than or equal to

<= Less than or equal to

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

Equal to is for comparing the two variable is same or not, e.g. a= 7 and b =7 to check if they have same value we use equal to operator a == b.

Assignment operator is used for assigning a value to a variable

A = 10+19B

7. Identify the three blocks in this code:

Block 1: Start

spam = 0

if spam == 10:

print('eggs')

Block 1: End

Block 2: Start

if spam > 5:

print('bacon')

Block 2: End

Block 3: Start

else:

print('ham')

print('spam')

print('spam')

Block 3: End

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=0

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?

Control + C

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

The break keyword exits the loop on some condition being fulfilled where as continue will continue to execute the loop on fulfilling the 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.

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