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 ).

|  |  |  |
| --- | --- | --- |
| first | second | and |
| False | False | False |
| False | True | False |
| True | False | False |
| True | True | True |

|  |  |  |
| --- | --- | --- |
| first | second | or |
| False | False | False |
| False | True | True |
| True | False | True |
| True | True | True |

|  |  |
| --- | --- |
| value | not |
| False | True |
| True | False |

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.

== - equal operator, = - assignment operator.

Equal operator used in if statement, for example.

Assignment operator for the initialize variable.

7. Identify the three blocks in this code:

spam = 0 – assignment operator

if spam == 10: - equal operator

print('eggs') expression block

if spam > 5: - equal operator

print('bacon') - expression block

else:

print('ham') - expression block

print('spam') - expression block

print('spam') - expression block

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 = '1'

if('1' in spam):

print('Hello')

elif('2' in spam):

print('Howdy')

else:

print('Greetings!')

9.If your programme is stuck in an endless loop, what keys you’ll press?

break

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

Break stops loop at all, continue only currently iteration/

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

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(0,11):

    print(i)

i = 0

while(i in range(0,11)):

      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?

spam.bacon()