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 operator | True | False |
| True | True | False |
| False | False | False |

|  |  |  |
| --- | --- | --- |
| OR operator | True | False |
| True | True | True |
| False | True | False |

|  |  |  |
| --- | --- | --- |
| Operator | X | Returns |
| NOT | False | True |
| NOT | True | False |

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) True

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.

Assignment operators are used to assign a value to a variable, but the equal-to operators are used in a condition statement, where returns a Boolean value.

7. Identify the three blocks in this code:

spam = 0

if spam == 10: # First block starts from here

print('eggs')

if spam > 5: # Second block starts from here

print('bacon')

else: # third block starts from here

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 spm == 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: Breaks and stops and the loop

continue: Skips a single iteration in a loop

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

They are exactly the same.

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 j in range(1, 11):

print(j)

j = 1

while j < 11:

print(j)

j += 1

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

Import spam

spam.bacon()