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

1. True 2. False

a = True

b = False

print('a: ', a)

print('b: ', b)

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1. What are the three different types of Boolean operators?

* AND
* OR
* NOT

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1. 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).

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4. What are the values of the following expressions?

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

not (5 > 4)

(5 > 4) or (3 == 5)

not ((5 > 4) or (3 == 5))

(True and True) and (True == False)

(not False) or (not True)

1. (5 > 4) and (3 == 5) = False

2. not (5 > 4) = False

3. (5 > 4) or (3 == 5) = True

4. not ((5 > 4) or (3 == 5)) = False

5. (True and True) and (True == False) = False

6. (not False) or (not True) = True

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1. What are the six comparison operators?

* == : is equal to
* != : is not equal to
* > : is greater than
* >= : is greater than or equal to
* < : is less than
* <= : is less than or equal to

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

* ' = ' : single equals to sign is used for the assignment operation.
* ' == ' : double equals to sign is used for the equal to condition check.
* When we want to assign something (eg. a = 10) we use the assignment operator. whereas when we want to check some condition (eg. 10 == 100) we use the equal to condition check operator.

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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')

A screenshot of a computer program

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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.

A screenshot of a computer code

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

1. Press Ctrl + C on the command line.
2. Restart the kernel

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

* Break: It is used to break the loop and exit from the loop
* continue: It is used to skip the current iteration of the loop and continue with the next iteration.

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

There is no difference as will Return the value.

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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.

A screenshot of a computer program

Description automatically generated with medium confidence

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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()