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 <

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).

|  |  |  |
| --- | --- | --- |
| A | B | A and B |
| False | False | False |
| False | True | False |
| True | False | False |
| True | True | True |

ss.

|  |  |  |
| --- | --- | --- |
| **a** | **b** | **a or b** |
| F | F | F |
| F | T | T |
| T | F | T |
| T | T | T |

|  |  |
| --- | --- |
| **a** | **not a** |
| F | T |
| T | F |

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 to is ‘==’ for comparison and assignment is ‘=’ for the assigning the value to a variable.

If (a==1) comparison

a=1 assignment

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.

*def f(x):*

*print("VISHNU")*

*# First, ask the player about their CPU*

*spam = 1*

*print("inside function"+"spam")*

*# The match statement evaluates the variable's value*

*match spam:*

*case 1: # We test for different values and print different messages*

*print ("Hello")*

*case 2:*

*print ("Howdy")*

*case \_: # the underscore character is used as a catch-all.*

*print ("Greetings!")*

*f('d')*

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 statement is used to stop the execution in the loop and continue is to stop current execution and continue with the next in loop.*

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

*Range (start,end, increment)*

*range (10) = 0 1 2 3 4 5 6 7 8 9*

*range (0,10)= 0 1 2 3 4 5 6 7 8 9*

*range(0,10,1) = 0 1 2 3 4 5 6 7 8 9*

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 x in range(1,11):*

*print(x)*

*x=1*

*while x < 11:*

*print (x)*

*x += 1*

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

X= spam()

x.bacon()