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 ).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **X** | **Y** | **NOT X** | **X AND Y** | **X OR Y** |
| false | false | true | false | false |
| false | true | true | false | true |
| true | false | false | false | true |
| true | true | false | true | 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?

> greater than

< less than

>= greater than equal to

<= less than equal to

== equal to

!= not 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.

Assignment operator is used when we want to assign some value to variable

Ex => a=10 here we are assigning value to 10 to variable a

Equal to used when we want to add any condition like if a == 10 here we are checking that variable a value is equal to 10

7. Identify the three blocks in this code:

spam = 0

if spam == 10: =>block

print('eggs')

if spam > 5: => block

print('bacon')

else: =>block

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.

spam = int(input())

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?

CTRL + C

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

Break use for stopping lopp from execution.

Continue use for skipping single iteration in loop

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

In for loop range(10), range(0, 10) and same which loop through range 0 to 9, and range(0,10,1) will take one step after each iteration i.e same like previous loops.

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(1,11):

print(i)

###for while loop

count = 1

while i >= 10:

if(count == 11):

break;

print(count)

count += 1

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

from spam import bacon