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

ANS: It has two possible values are TRUE and FALSE

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

ANS: The three basic Boolean are AND , OR and 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 ).

ANS: TRUE = 1 AND FALSE = 0

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | AND | OR | NOT (A) |
| 1 | 1 | 1 | 1 | 0 |
| 1 | 0 | 0 | 1 | 0 |
| 0 | 1 | 0 | 1 | 1 |
| 0 | 0 | 0 | 0 | 1 |

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) = 0 (False)

not (5 > 4) = 0(False)

(5 > 4) or (3 == 5) = 1(True)

not ((5 > 4) or (3 == 5)) = 0(False)

(True and True) and (True == False) = 0 (False)

(not False) or (not True)

5. What are the six comparison operators?

ANS:

< , > , <= , >=, == , !==

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

ANS : The = is a simple assignment operator. It assigns value from right side operator to the left side operand . While on the other hand == checks if the values of two operands are equal or not . If yes the condition becomes true and it returns a non zero value

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')

ANS:

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.

ANS :

spam = 0

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?

ANS: ctrl + c

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

ANS: Break statement resume the control of the program to the end of loop and made executional flow outside the loop and continue statement resume the control of the program to the next iteration of that loop enclosing continue and made executional flow inside the loop again

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

ANS: range(10) = 1,2,3,…..,9

range(0,10) = 1,2,….,9

range(0,10,1) = 1,2,….9

All are given same output but in range(10) is not define a start point and step.

range(0,10) not define a step and range(0,10,1) in this case define start ,end point and step

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.

ANS: using for loop

A=range(11)

for i in a:

print(i)

using while loop

i=1

while (i<=10):

print(i)

i=i+1

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

ANS write a bacon()