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

--True and False-Two values of Boolean .

We can write bool().

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 Table

|  |  |  |
| --- | --- | --- |
| A | B | Q |
| T | T | T |
| T | F | F |
| F | T | F |
| F | F | F |

OR Table

|  |  |  |
| --- | --- | --- |
| A | B | Q |
| T | T | T |
| T | F | T |
| F | T | T |
| F | F | 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 used to compare the values of both the variables, while assignment operator is assigning the values to the variable.

= is assignment operator. say x = 5, assigns value 5 to variable x. == is conditional equal to operator. we will typically use == this for checking the value. x==5 will check whether the value of x is 5.

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')

---Python uses Indentation to indicate a block of code. i.e 1. print(‘eggs’)

Then,2.print(‘bacon’)

3. Blocks consist of two or more same statements also i.e 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 spam = 2 :

Print(‘’Howdy”)

Else :

Print(‘Greetings’)

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

--Break

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

--Break statement terminates the loop entirely ,where Continue statement terminates the current loop iteration.

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

--The range function is used to generate a sequence of numbers. (Iterate sequence type)

The parameters for all is same. Range(10 )— stop value = 10 and start value by default = 0

Range (0,10)—start = 0, stop =10

Range(0,10,1)—start= 0,stop=10,step=1

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.

-1. For i in range(1,11):

Print(i)

ssi+=1

- 2. n=10

i=1

while i<=10:

print(i)

i+=1

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

----spam.bacon()