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

Ans: Boolean Datatype takes only two values. The values are **True** and **False.**

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

Ans: The three Boolean operators 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 ).

|  |  |
| --- | --- |
| **Value** | **Not** |
| True | False |
| False | True |

|  |  |  |  |
| --- | --- | --- | --- |
| **Value\_1** | **Value\_2** | **And** | **Or** |
| True | True | True | True |
| True | False | False | True |
| False | True | False | True |
| False | False | False | False |

4. What are the values of the following expressions?

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

Ans: **False**

not (5 > 4)

Ans: **False**

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

Ans: **True**

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

Ans: **False**

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

Ans: **False**

(not False) or (not True)

Ans: **True**

5. What are the six comparison operators?

Ans: The six comparison operators are: >,<,==,!=,>=,<=

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

Ans: Assignment operator is “=” whereas equal to is “==”

For assigning 5 to variable a we write: a = 5

However, to compare is a is equal to 5 we write: a == 5

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs')

------------------------------------Block-1

if spam > 5:

print('bacon')

-------------------------------------Block-2

else:

print('ham')

print('spam')

print('spam')

--------------------------------------Block-3

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:

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** is used in loop to come out of the entire loop when a condition is met where as **continue** is used in loop to ignore the rest of the code in the loop and go straight back to the starting of the loop condition.

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

Ans: And of the three are the same which means a list containing values from 0 to 9 in the step of 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.

Ans:

Using **for** loop:

for i in range(1,11):

print(i)

Using **while** loop:

i = 1

while (i < 11):

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?

Ans: spam.bacon()