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

**Ans :-**Two values of Boolean data type are :- True and False. Boolean data type can be written with bool keyword and the values returned is True = 1 and False = 0.

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

**Ans :-** The three different types of Boolean data types are :-

* 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 ).**

**Ans :- Truth Table for Boolean Operator’s:**

* **AND Truth Table**

|  |  |  |
| --- | --- | --- |
| A | B | Output Value |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

* **OR Truth Table**

|  |  |  |
| --- | --- | --- |
| A | B | Output Value |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

* **NOT Truth Table**

|  |  |
| --- | --- |
| A | Output Value |
| 0 | 1 |
| 1 | 0 |

**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?**

**Ans :- Six Comparison operators are :-**

* == Strictly Equal to
* != Not equal to
* > Greater than
* < Less than
* > = Greater than or equal to
* !< Not less than

**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 Operators are:- The operators which are used for assigning values to a variable are like (=, +=,-=,//=,\*\*= )etc.

Equal to operator (==) :- It is used for comparing two values.

Ex :- a=10

a\*=10

print (a) (It will give you output as 100)

**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 :-** print('eggs')------------Block-1

print('bacon')----------Block-2

print('ham')------------Block -3

print('spam') ----------Block -3

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 :-** spam = int(input (" enter the value : "))

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 :-** By the help of CTRL+C we can get out of the endless loop.

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

**Ans :-** The break statement "jumps out" of a loop. The continue statement "jumps over" one iteration in the loop.

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

**Ans** :- In a for loop there is no difference between all three cases as all of them will give us same output.

* Range(10) :- It gives us output from 0 to 9.
* Range(0,10) :- It gives us output from 0 to 9.
* Range(0,10,1) :- It gives us output from 0 to 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.**

**Ans :- For loop:**

For I in range (1,11):

print (I)

**While Loop:**

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?**

**Ans :-** we have to call that  function can be called with **spam.** **bacon()**.