**1. What are the Boolean data type’s two values? How do you go about writing them?**

**Ans.** Boolean data type represents either True or False. bool() function allows us to evaluate which value is either True or False

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

**Ans.**

1. AND
2. OR
3. 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.**

|  |  |
| --- | --- |
| **Expression** | **Evaluate** |
| True and False | False |
| False and False | False |
| False and True | False |
| True and True | True |

|  |  |
| --- | --- |
| **Expression** | **Evaluate** |
| True or False | True |
| False or False | False |
| False or True | True |
| True or True | True |

|  |  |
| --- | --- |
| **Expression** | **Evaluate** |
| NOT True | False |
| NOT False | True |

**4. What are the values of the following expressions?**

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

**not (5 > 4)** False

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

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

**(True or True) or (True == False)** True

**(not False) or (not True)** True

**5. What are the six different types of reference operators?**

**Ans.**

1. == (equal) Returns a Boolean stating whether two expressions are equal.
2. != (not equal) Returns a Boolean stating whether two expressions are not equal.
3. > (greater than) Returns a Boolean stating whether one expression is greater than the other.
4. >= (greater than or equal) Returns a Boolean stating whether one expression is greater than or equal the other.
5. < (less than) Returns a Boolean stating whether one expression is less than the other.
6. <= (less than or equal) Returns a Boolean stating whether one expression is less than or equal the other.

**6. How do you tell the difference between the equal to or assignment operators?**

**Ans.**

Equal operator (==) is a comparison operator which compares the two expression whether they are equal or not.

Assignment operator (=) is used to assign the value to any variable.

**7. Describe a condition or when you would use one.**

**Ans.**

If we have to find the expression is true or false, we use equal operator. Ex- 4==5 result is False. And if we have any variable such as ‘a’ and we have to assign the value to it us can write as a = 5.

**8. Recognize the following three blocks in this code:**

**spam = 0**

**if spam == 10:**

**print(‘eggs’)**

**if spam > 5:**

**print(‘bacon’)**

**else:**

**print(‘ham’)**

**print(‘spam’)**

**print(‘spam’)**

**9. Create a programme that prints. If 1 is stored in spam, prints Hello; if 2 is stored in spam, and**

**prints Greetings! if anything else is stored in spam.**

**Ans.**

spam=int(input())

if spam == 1:

print("hello")

elif spam == 2:

print("Howdy")

else:

print("Greetings!")

**10.If your programme is stuck in an endless loop, what keys can you press?**

**Ans.**

Ctrl + C

**11. How can you tell the difference between break or continue?**

**Ans.**

Break statement terminates the current loop and move to next statement and execute it. Continue statement forces the loop to execute the next iteration. When the continue statement is executed in the loop, the code inside the loop following the continue statement will be skipped and the next iteration of loop will begin.

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

**Ans.**

All these function will give same results.

**13. Using a for loop, write a short programme that prints the numbers 1 to 10 Then, using a while**

**loop, create an identical programme that prints the numbers 1 to 10.**

**Ans.**

for i in range(1,11):

print(i)

i=1

while i<11:

print(i)

i+=1

**14. If you had a function named bacon() inside a module named spam, how would you call it after**

**importing spam?**

**Ans.**

spam.bacon().