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

Ans: - True, False

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

Ans: - 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: -

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Condition 1 | Condition 2 | NOT (condition 1) | NOT (condition 2) | AND | OR |
| False | False | True | True | False | False |
| False | True | True | False | False | True |
| True | False | False | True | False | True |
| True | True | False | False | True | True |

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

Ans: -

(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: -

Greater than >

Less than <

Greater than equal to >=

Less than equal to <=

Equal to ===

Not equal to !==

**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 an assignment operator is used to assign the value on the right to the variable on the left. The '==' operator checks whether the two given operands are equal or not

**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: -

ham

spam

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 = int(input())

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 eliminates the execution of remaining iteration of loop whereas continue will terminate only the current iteration of loop.

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

Ans:-

Range(10) indicates to use integers from range 0 to 10

Range(0,10) indicates to use integers in range 0 to 10

Range(0,10,1) indeicates to use integers from range 0 to 10 and increment 1 after each integer

**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: -

program that prints the numbers 1 to 10 using a for loop

for i in range(0,11,1):

print(i)

program that prints the numbers 1 to 10 using a 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: -spam.bacon()