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

**Ans:** It has two possible values i.e., **True and false**. It is used to represent the truth values of the expressions. For example, 1==1 is True whereas 2<1 is False.

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

**Ans:** There are three types of Boolean operators i.e., AND, OR and NOT.

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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:**

4. What are the values of the following expressions?

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

not (5 > 4)

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

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

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

(not False) or (not True)

**Ans: False, False, True, True, False ,True**

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5. What are the six comparison operators?

**Ans**: less than, greater than, less than or equal to, greater than or equal to, equal to,

and 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 '==' operator checks whether the two given operands are equal or not, it returns true. Otherwise it returns false**.** The “=” assignment operator is used to assign the value on the right to the variable on the left.

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: Output: ham**

**spam**

**spam**

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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 = input()**

**if spam == 1:**

**print('Hello')**

**elif spam == 2:**

**print('Howdy')**

**else:**

**print('Greetings!')**

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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:**

**It is used to terminate the enclosing loop like while, do-while, for, or switch statement where it is declared, It resumes control over the program until the end of the loop, It also helps with the flow of control outside the loop.**

**Continue:**

**It helps skip the remaining part of the loop, It continues to execute the next iteration**

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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 given range values, while we run the given range it executes the same output i.e. range(0,10)

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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 num in range (1,10):**

**print(num)**

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**i = 1**

**while(i<=10):**

**print(i)**

**i += 1**

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

**Ans:** This function can be called with spam.bacon() That import statement imports a..

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