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

Ans:- The two values of boolean datatype are True and False, True value can be written as 1 and False value can be written as 0.

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

Ans:- The three different type of Boolean operators are:-

1) AND
2) OR
3) 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:- 1) AND(&) 2) OR(|) 3) NOT(!)

a	b	a&b	a	b	a|b	a	! a
0	0	0	0	0	0	1	0
0	1	0	0	1	1	0	1
1	0	0	1	0	1		
1	1	1	1	1	1		

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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:- 1) False

2) False

3) True

4) False
5) True

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5. What are the six comparison operators?

Ans:- The six comparison operators are:-

1) equals to (==)
2) Not equals to (!=)
3) less than (<)
4) greater than (>)
5) less than or equals to (<=)
6) greater than or equals to (>=)

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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 equal to operators are off two types:-

1) single equal to operator.(=)
2) double equal to operator. (==)

single equal to operator (=) is the assignment operator and is to store a value in a variable.

double equal to operator (==) is to check whether two values were same or not.

—-> conditions to use assignment and equal to operator are while assigning a value and while checking the similarity between values.

ex:- assignment operator(=)------> a = 10, here value 10 was assigned to variable a.

equal to operator(==)---------> 3 == 5, here value 3 was checked with value 5.

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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:- 1) if-block(spam == 10).

2) if-block(spam > 5).

3) else-block.

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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 = int(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

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

Ans:- The difference between break and continue are:-

Break statement was to make an immediate exit of the execution of code by the inner loop.

Continue statement was to execute the code by the next iteration of the loop.

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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:-

1) range(10)------> range(10) is the function with only stop value 10.
2) range(0, 10)------>range(0,10) is the function with start value 0 and stop value 10.
3) range(0, 10, 1)---->range(0,10,1) is the function with start value 0 , stop value 10 and step value 1.

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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 i in range(1,11):

    print(i)
```

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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 can be called by function-calling as spam.bacon()