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

Ans-The two values of the Boolean data type are True and False, and they are written in Python as True and False.

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

Ans-The three different types of Boolean operators are AND, OR, and 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-AND Truth Table:

True AND True = True

True AND False = False

False AND True = False

False AND False = False

OR Truth Table:

True OR True = True

True OR False = True

False OR True = True

False OR False = False

NOT Truth Table:

NOT True = False

NOT False = True

**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-(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-The six comparison operators are:

1. equal to (==)
2. not equal to (!=)
3. greater than (>)
4. less than (<)
5. greater than or equal to (>=)
6. less than or 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 equal to operator (==) is used to compare two values to see if they are the same. The assignment operator (=) is used to assign a value to a variable. A condition using the equal to operator might be something like: if x == 5:, which would check if the value of x is equal to 5. A condition using the assignment operator might be something like: x = 5, which would assign the value of 5 to the variable x.

**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')**Top of Form

Ans-The three blocks in the code are:

1.spam = 0

2. if spam == 10:

print('eggs')

3.if spam > 5:

print('bacon')

else:

print('ham')

print('spam')

print('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-Here's the code:

spam = 5

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-To interrupt an endless loop in Python, you can press the Ctrl-C .

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

Ans-The break statement is used to immediately exit a loop, while the continue statement is used to skip to the next iteration of the loop.

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

Ans-range(10) generates a sequence of numbers from 0 to 9. range(0, 10) is equivalent to range(10). range(0, 10, 1) generates a sequence of numbers from 0 to 9, incrementing by 1 each time.

**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-Here's the for loop:

for i in range(1, 11):

print(i)

And here's the while loop:

i = 1

while i <= 10:

print(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-If the function named bacon() is inside a module named spam, you can call it after importing spam using the following syntax: spam.bacon().