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

- True and False, using capital T and F .

#Eg:

a=True

b=False

print(a)

print(b)

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

Answer: 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:- True and True is True.

True and False is False.

False and True is False.

False and False is False.

True or True is True.

True or False is True.

False or True is True.

False or False is False.

not True is False.

not False is True.

4. What are the values of the following expressions?

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

**Answer: False**

not (5 > 4)

**Answer: False**

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

**Answer: True**

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

**Answer: False**

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

**Answer: False**

(not False) or (not True)

**Answer: True**

5. What are the six comparison operators?

Answer:

1. **==**
2. **>=**
3. **<=**
4. **!=**
5. **>**
6. **<**

6. How do you tell the difference between the equal to and assignment operators?Describe a condition and when you would use one.

if you want to assign the value to any variable then you would prefer to use assignment operators

**a = 4**

but if you want to compare the value with another value or variable then you would use the equal operators especially in If block of statement.

**if b == 5: #comparision**

**print(“hello”)**

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')

**Actual Answer:**

spam = 0

if spam == 10:

print('eggs')

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.

spam = int(input("give number"))

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?

CTRL+C

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

**Answer:**

**Break**: It eliminates the execution of remaining iteration of loop.It early terminates the loop.‘break’ will resume control of program to the end of loop enclosing that ‘break’.

**Continue**: It will terminate only the current iteration of loop.The ‘continue’ will resume the control of the program to next iteration of that loop enclosing ‘continue'.The ‘continue’ does not stop the continuation of loop and it stops the current.

# use of break

for i in range(10):

if(i==7):

break

print(i)

print('Breaked')

#use of continue

for i in range(10):

if(i==7):

continue

print(i)

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

**Answer**: There is no difference between range(10), range(0, 10), and range(0, 10, 1) as starting value would be 0 & end value would be 10(that would be excluded) & Increment value by dafault would be 1.

for i in range(10):

print(i)

print("xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx")

for i in range(0,10):

print(i)

print("xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx")

for i in range(0,10,1):

print(i)

All three block of statement will give same output

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.

**Program : For Loop:**

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

**print(i)**

**Program: While loop**

**i = 1**

**while i<11:**

**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?

**Answer:**

**Import spam**

**# Calling the function & assigning this variable** bac

**bac = spam.bacon()**