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. And : Is used for multiple condition must be satisfied

|  |  |  |
| --- | --- | --- |
| A | B | C |
| 1 | 1 | 1 |
| 1 | 0 | 0 |
| 0 | 1 | 0 |
| 0 | 0 | 0 |

Or : Is used for atleast one condition must be satisfied.

|  |  |  |
| --- | --- | --- |
| A | B | C |
| 1 | 1 | 1 |
| 1 | 0 | 1 |
| 0 | 1 | 1 |
| 0 | 0 | 0 |

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, False

5. What are the six comparison operators?

Ans. >, <, >=, <=, ==, !=

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

Ans. Equal to (==) : It is used for checking the values of two variable, having same value or different

If(5==3):

print(“Conidtion is satisfying”)

Assignement (=) : It is used for assigning some value to any variable.

a=5

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.

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

print('spam')

print('spam')

Block A:

if spam == 10:

print('eggs')

Block B:

if spam > 5:

print('bacon')

Block C:

else:

print('ham')

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.

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: It will stop the execution once the specified condition will be satisfied.

Continue: It will skip the current execution only.

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

Ans. range(10) : loop will go till 10 like; for i in range(10) – It will start from 0 index and go till 9 index total 10 count

range(0,10) : index will start from 0

range(1,10,1) : index will start from 0 and it will skip by index 1

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 LOOP**

for i in range(1,11):

print(i)

**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?

Ans.

import spam

spam.bacon()