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

Ans 1:- Two values of the Boolean data type is TRUE or FALSE. We write them in the form of 0 and 1 .

O represent false.

1 represent true.

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 ).

AND

|  |  |  |
| --- | --- | --- |
| X | Y | XY |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

OR

|  |  |  |
| --- | --- | --- |
| X | Y | X+Y |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

NOT

|  |  |
| --- | --- |
| x | X’ |
| 0 | 1 |
| 1 | 0 |

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) :- 0

not (5 > 4):- 1

(5 > 4) or (3 == 5):- 1

not ((5 > 4) or (3 == 5)):- 0

(True and True) and (True == False):-0

(not False) or (not True):-1

5. What are the six comparison operators?

Ans :- 1. Less Than(<)

2.Greater than(>)

3.Less than or equal to(<=)

4.Greater than or equal to(>=)

5.Equal to (==)

6.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 6:- The Assigment operator is used to assign a variable on any side . But equal to is used to check whether two operands are equal or not.

Condition:-

X = 40;here you assigning a value to a variable so assignment is use.

X=40

Y=40

So X==Y here we are checking whether x is equal to y or not .

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')

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(“write any whole number”)

if spam==1:

print(“Hello”)

if spam==2

print(“Howdy”)

else

print(“Greetings!”)

9.If your programme is stuck in an endless loop, what keys you’ll press?

Ans 9:- CTRL + C

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

Ans 10:- break statement is used to exit from the loop.but continue statement is use to to jump to next iteration after this statement are skip.

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

There is no difference between this range(10),range(0,10),and range(0,10,1). There output is same 0,1,2,3,4,5,6,7,8,9.but if there value change in range (0,10,2) then we have a output with difference of two 0,2,4,6,8.

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 12:- For loop code

for i in range(1,10):

print(i,end=” “);

while loop code

i=1

while i<=10:

print(i,end=” “)

i=i+1

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

Ans13:- spam.bacon()