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

Ans :- two values of Boolean data type are True and False ,we write both values True and False.

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

Ans :- Boolean operators are : and ,or, not they return value true and false.

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.Truth table for and..

|  |  |  |  |
| --- | --- | --- | --- |
| x | and | y | return |
| True | and | True | True |
| True | and | False | False |
| False | And | False | False |
| False | and | True | False |

2. Truth table for or…

|  |  |  |  |
| --- | --- | --- | --- |
| x | or | y | return |
| True | or | True | True |
| True | or | False | True |
| False | or | False | False |
| False | or | True | True |

3. Truth table for not …

|  |  |  |
| --- | --- | --- |
| Not | X | returns |
| 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 : - 1 . equal to ==

2. not equal to !=

3. greater than >

4. less than <

5. greater than equal to >=

6. less than 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 . = is an Assignment Operator it is used to assign the value of variable or expression, while == is an Equal to Operator and it is a relation operator used for comparison.

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. 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 :-

spam =1

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: A break statement in Python alters the flow of a loop by terminating it once a specified condition is met.

Continue: The continue statement in Python is used to skip the remaining code inside a loop for the current iteration only

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

Ans : range(10) in this range initial value default but end values is variable .

Range(0,10 ) in this range initial and end value are variable.

Range(0,10,1) both values are variable and gaping between two values is one.

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)

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 :- This function can be called with spam.bacon().