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

Ans – True and False are two values of Boolean data type.

For ex : 1. >> x = 0

>> Bool(x)

>> False

2. >> y = 1.5

>> Bool(y)

>> True

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

Ans- A = True , B= False

1. OR - A OR B => True

2. AND - A AND B => False

3. NOT = not A => False

4. == (Equivalent) - A == B => False

5.! = ( Not Equivalent) - A != B => True

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 – P = 4,Q=8

1. P and Q => True
2. P OR Q => True
3. P == Q => False
4. P!=Q => True

4. What are the values of the following expressions?

1. (5 > 4) and (3 == 5) => False

2. not (5 > 4) => False

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

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

5. (True and True) and (True == False) => False

6. (not False) or (not True) => True

5. What are the six comparison operators?

Ans- 1. Less Than (<)

2. Greater than (>)

3. Less than equal to (<=)

4. Greater than 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 - Single = operator is arithmetic operator, use to assign value into variable and == is a comparison operator use to compare two variables.

For Ex.

A = 10 , B=20 => Assignment operator

A == B =>Comparison Operator

7. Identify the three blocks in this code:

spam = 0

1 if spam == 10:

print('eggs')

2.if spam > 5:

print('bacon')

3.else:

print('spam')

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(“Enter value of spam”)

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 = CTRL+C

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

Ans –

* Break statement is used to terminate enclosing loop in while , do while or switch statement wherever break is declared.
* Continue statement is used mainly skip the loop wherever continue is declared and execute the next iteration.

For ex.

|  |  |
| --- | --- |
| L = [ ‘a’,’b’,’c’,’d’]  for i in range(len(L)):  print(L[i])  if(L[i] == ‘c’):  print(“c found”)  break  print(“After break statement”)  print(“Loop is terminated”) | For i in range(10):  if i == 7:  continue  print(“No. is:”,i) |

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

Ans – range(10): Means returns sequence of no from 0 to 10. It starts by default from 0 no.

range(0,10): returns sequence of no from 0 to 10.

Range(0,10,1) : returns no from 0 to 10 incremented by 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.

|  |  |
| --- | --- |
| for i in range(1,10):  print(i) | i = 1  While i <= 10:  Print(“value of i is :”,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()