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

TRUE and FALSE are the two values of Boolean data type

a = True

b = False

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

The three basic 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 evaluates).

|  |  |  |  |
| --- | --- | --- | --- |
| X | Y | AND operation | OR operation |
| True | True | True | True |
| True | False | False | True |
| False | True | False | True |
| False | False | False | False |

4. What are the values of the following expressions?

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

Ans : False

not (5 > 4)

ans: False

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

Ans: True

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

ans: False

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

Ans : False

(not False) or (not True)

Ans : True

5. What are the six comparison operators?

 Less than(<), Greater than(>), Less than or equal to(<=), Greater than or equal to(>=), Equal to(==) and Not equal to (!=) are six comparison operator

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

The “=” is an assignment operator is used to assign the value on the right to the variable on the left. The '==' operator checks whether the two given operands are equal or not. If so, it returns true.

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 :

There are three blocks

Below is thi code for 3 blocks

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()

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 :** Press ctrl-C to stop a program stuck in an infinite loop.

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

Break statement used to terminate the enclosing loop such as while, do-while, for or switch statement wherever break is declared. **Continue statement** mainly skip the rest of loop wherever continue is declared and execute the next iteration

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

All are same

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: Using for loop

For i in range(1,11):

Print(i)

Using while loop

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().