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

True

False

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

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 ).

|  |  |  |
| --- | --- | --- |
| AND | | |
| I/P | | O/P |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |
| OR | | |
| I/P | | O/P |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |
| NOT | | |
| A | | NOT A |
| 1 | | 0 |
| 0 | | 1 |

4. What are the values of the following expressions?

(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

True and True) and (True == False)

5. What are the six comparison operators?

<, >, <=, >=, ==, !=

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

Equal to(==)

When we need to comparing two value at that we can use equal to operators.

Assignment operators(=)

When we need to assign a value or data or information in the variable at that time we can use an assignment operators.

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print(spam)

print('eggs')

if spam>5:

print(spam)

print('Bacon')

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.

spam = 0

if spam == 1 or spam == 2:

if spam == 1:

print('Hello')

else:

print("Howdy")

else:

print("Greetings!")

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

Control + c

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

Break: instant termination of loop and exit from the loop

Continue: it will skip current operation and go for next operation or go on natural way. Pass the control to a main loop.

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

range(10): it give value range from 0 to 9

Here: it take one argument. The value is end point OR series stopping point. Zero is included. range(end).

range(0,10): it give value range from 0 to 9

Here:- It will took a two arguments. Like range(0,10) :--> 0 is starting point, 10 is end point(in output or value excluded). But it’s not necessary to series start always from 0(Zero). It will depends on user from where user wants to start.

range(start, end)

Range(0,10,1): (start, end, step)

Here:- it will took a three arguments. In this case the values printed (0,1,2,3,4,5,6,7,8,9). If user will pass range(0,10,2) the output is (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.

For loop:

for i in range(1,11):

print(i)

while loop

i = 0

while i<10:

i += 1

print(i)

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

Ans:-

From spam import bacon

Bacon()