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

Answer: “True” and “False” are two values of the Boolean data type and these are written as “True” and “False”.

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

Answer: Three different types of Boolean operators “NOT”, “OR” and “AND ”=

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 ).

Answer:

|  |  |  |  |
| --- | --- | --- | --- |
| a | b | a **and**  b | a **or** b |
| 1 | 0 | 0 | 1 |
| 0 | 1 | 0 | 1 |
| 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 |

|  |  |
| --- | --- |
| a | Not |
| 1 | 0 |
| 0 | 1 |

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)

Answer:

(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?

Answer

: == : equal to

!= : not equal

> : greater than

< : less than

>=: greater than or equal to

<=: less than or 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.

Answer: we using single equalto as Assignment operator and use double equal to compare

Eg : a=10 ----- Assignment operator  
 a == 10 -- -- here we compare

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')

Answer:

spam = 0

if spam == 10: :block 1

print('eggs')

if spam > 5: : block 2

print('bacon')

else: :block 3

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.

Answer:

spam = int(input(“Enter the no : ” ))

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?

Answer: If your program is running from the command line press CTRL + C to terminate.

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

Answer: We use keyword **break** and **continue** in program this way we tell the difference between break and continue.

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

Answer: All the three ranges ie range(10), range(0, 10), and range(0, 10, 1) output is same .

Ouput: 0 , 1, 2, 3, 4, 5, 6, 7, 8, 9

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.

Answer: using for Loop:

For i in range(0,11,1):

print(i)

Using while loop:

no = 11

i = 0

while i < no:

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?

Answer: spam.bacon() is the way we would call if a a function named bacon() inside a module named spam, and if we try to call it after importing spam.