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

Answer:The 2 values of Boolean data types “TRUE” and “FALSE”.

The correct way of writing in a expression is X=True or X=False

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

Answer

The different types of Boolean operators

1.NOT

2.AND

3.OR

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:

|  |  |  |
| --- | --- | --- |
| NOT |  |  |
| A | NOT A |  |
| TRUE | FALSE |  |
| FALSE | TRUE |  |
|  |  |  |
| AND |  |  |
| A | B | A AND B |
| TRUE | FALSE | FALSE |
| FALSE | TRUE | FALSE |
| FALSE | FALSE | FALSE |
| TRUE | TRUE | TRUE |
|  |  |  |
| OR |  |  |
| A | B | A OR B |
| TRUE | FALSE | TRUE |
| FALSE | TRUE | TRUE |
| FALSE | FALSE | TRUE |
| TRUE | TRUE | FALSE |

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:The six comapridion operators

1.:Equal to :==

2.Greater than >

3.Less than <

4.Greater than equal to >=

5.Less than 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.

Answer:

The equal to operator will have 2 consecutive equal to symbol like “==” where as assignment operator will have only one equal to sign “=”

Example

Assignment

X=1

EQUAL TO check

If(5==5):

Print(“5 is equal to 5” )

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:

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.

ANSWER

If spam==1:

Print(“Hello”)

Else if spam==2:

Print(“Howdy”)

Else:

Print(“Greetings!”)

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

ANSWER:Press CNTRL+C

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

BREAK is used to stop execution of a Loop and control comes out of the loop and start execution of next step after the Loop whereas CONTINUE helps in coming skipping 1 iteration of the loop and control stays inside the loop till end of execution.

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

ANSWER

Range(10):It starts from 0 till 9

Range(0,10):Its includes 0 and end at 9

Range(0,10,1):it prints 0 till 9

There are no difference in output of the all the 3 statements

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

For num in range(1,11):

Print(num)

Num=1

While num<11:

print(num)

Num=num+1

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

ANSWER:The function can be called using a bot operator as spam.bacon()