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

Answer:

True and False

We can evaluate the values using with and without bool() function.

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

Answer

AND

OR

NOT

1. 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).

Answer

AND

FALSE AND FALSE is FALSE

FALSE AND TRUE is FALSE

TRUE AND FALSE is FALSE

TRUE AND TRUE is TRUE

OR

FALSE OR FALSE is FALSE

FALSE OR TRUE is TRUE

TRUE OR FALSE is TRUE

TRUE OR TRUE is TRUE

NOT

Input is TRUE then Output become FALSE

Input is FALSE then Output become TRUE

Truth table

True – 1 False - 0

AND

A B output

0 0 0

0 1 0

1 0 0

1 1 1

OR

A B output

0 0 0

0 1 1

1 0 1

1 1 1

NOT

Input Output

1. 1
2. 0

1. 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

1. What are the six comparison operators?

Answer

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

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

Answer

Equal to (==) It compare two values

Assignment (=) It stores the value of variable.

When we want to compare two parameters, then will use equal to operator.

When we want to store value of variable, then will use assignment operator.

1. 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

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

print('spam')

1. 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 a number: "))

if spam == 1:

  print("Hello")

elif spam == 2:

  print("Howdy")

else:

  print("Greetings!")

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

Answer

Ctrl + C

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

Answer

Break stops the execution of the loop and jumps the next line of code.

Continue skips the current iteration of loop and move to the next one.

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

Answer

range (10) End

for i in range (10):

  print(i)

output

0

1

2

3

4

5

6

7

8

9

Range(0, 10) Start and End

for i in range (0, 10):

  print(i)

output

0

1

2

3

4

5

6

7

8

9

Range(0, 10, 1) Start, end and step

for i in range (0, 10, 1):

  print(i)

output

0

1

2

3

4

5

6

7

8

9

1. 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 Loop-----

for i in range (1, 11):

  print(i)

While ------

i=1

while (i<=10):

  print(i)

  i=i+1

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

Answer

spam.bacon()