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

Answer:

The two values of the Boolean datatypes are true and false. We write them as true=1 and false=0.

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

Answer:

The three different types of 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 evaluate ).

Answer:

Truth table for OR

A B C

0 0 0

0 1 1

1 0 1

1 1 1

Truth table for AND

A B C

0 0 0

0 1 0

1 0 0

1 1 1

Truth table for NOT

A B

0 1

1 0

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:

False

False

True

False

False

True

5. What are the six comparison operators?

Answer:

Greater than >

Less than <

Greater than or equal to >=

Less than or equal to <=

Equal to ==

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:

Assignment operator = is used to assign the right hand side value to the left hand sign whereas == is used to check whether the left hand side value and right hand side values are equal or not and returns a Boolean type answers.

a=10

b=5

if a==10:

  print("a is equal to 10")

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:

The three blocks in this code is indentation. Print statement should be given inside an if and else part of the program.

The correct code is:

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:

Spam=1

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?

Answer:

CTRL-C

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

Answer:

break statement is used to terminate the loop when the specified condition is met and

continue statement is used to terminate only the current iteration of loop.

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

Answer:

range(10) – prints the numbers from 0 to 9. Here 10 is the stop point.

range(0,10) – prints the numbers starting from 0 to 9. Here 0 is the start point and 10 is the stop point.

range(0,10,1) – prints the number starting from 0 to 9. Here 0 is the starting point, 10 is the stop point and 1 is the step count.

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 loop

for num in range(1,11):

  print(num)

while loop

input = 1

while input <= 10:

  print(input)

  input += 1

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

importing spam?

Answer:

bacon()