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

Answer: TRUE and FALSE

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

Answer: 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 ).

Answer:

True=1

False =0

|  |  |  |
| --- | --- | --- |
| AND | OR | NOT |
| |  |  |  | | --- | --- | --- | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 1 | | |  |  |  | | --- | --- | --- | | 0 | 0 | 0 | | 0 | 1 | 1 | | 1 | 0 | 1 | | 1 | 1 | 1 | | |  |  | | --- | --- | | 0 | 1 | | 1 | 0 | |

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

5. What are the six comparison operators?

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

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

==- is used a equal to for conditions

=- used for assigning values against a variable

7. Identify the three blocks in this code:

spam = 0

Block 1

if spam == 10:

print('eggs')

block 2:

if spam > 5:

print('bacon')

else:

print('ham')

block 3:

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.

def prnt(l):

    if l==1:

      print('spam')

    if l==2:

      print('Howdy')

    else:

      print('Greetings!')

prnt(8)

Greetings!

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

Answer: ‘n’

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

Answer:

Break: terminates the entire loop abruptly

Continue : terminates the current loop

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

Answer: all are same. Lists numbers between 0 to 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.

For Loop:

n=10

l=[]

for i in range(1,n+1):

  l.append(i)

print(l)

while Loop:

a=0

while(a<10):

  a=a+1

  print(a)

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

Answer : spam.bacon()