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

Ans: True and False

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

Ans: 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 ).

Ans:

|  |  |  |
| --- | --- | --- |
| a = 10  b = 20  a>8 and b>18  True | a = 10  b = 20  a>50 or b<50  True | a = 10  a > 10  not (a>10)  True |

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?

Ans: <, >, ==, <=, >=

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

Ans: == is used to compare two values & = is used to assign the value e.g. a=10 means value of is 10 & 2==2 it will return true.

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')

Ans:

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.

Ans:

spam = 0

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?

Ans: CTRL+C

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

Ans: break terminates the loop while continue terminates only current iteration of the loop.

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

Ans: all returns will be same

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.

Ans:

n = 10

for i in range (0,n):

print (i+1)

n = 1

while n < 11 :

print (n)

n = n+1

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

Ans: spam.bacon()