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

A. TRUE and FALSE are the two values of Boolean datatype

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

A. AND, OR, NOT are the three Boolean operators

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 ).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | (A AND B) | (A OR B) | (NOT A) |
| True | True | True | True | False |
| True | False | False | True | False |
| False | True | False | True | True |
| False | False | False | False | True |

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) 0

not (5 > 4) 0

(5 > 4) or (3 == 5) 1

not ((5 > 4) or (3 == 5)) 0

(True and True) and (True == False) 0

(not False) or (not True) 1

5. What are the six comparison operators?

A. <, >, ==, !=, <=, >=

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

A, = is an assignment operator, == is a conditional operator

Eg.: a=3 # assigns value 3 to a

a==4 # compares value of a and 4

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs') # block1

if spam > 5:

print('bacon') # block2

else:

print('ham') #block3

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.

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?

A. Ctrl + c

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

A. break statement breaks the loop while continue statement skips the current iteration

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

A. range(10) starts with 0 and ends with 9 as a default increment of 1

range(0, 10) starts with 0 and end with 9 as mentioned with increment of 1

range(0, 10, 1) starts with 0 ends with 9 at a step size of 1 given in brackets

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.

A. for i in range(10):

print(i+1)

i=1

while(i<=10):

print(i)

i=i+1

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

A. Spam.bacon()