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

True, False

print (1 > 2) -----Output False

print (10 > 1) -----Output True

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

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 evaluates).

|  |  |  |  |
| --- | --- | --- | --- |
|  | and |  |  |
|  | A | B | Output |
|  | True | True | True |
|  | False | False | False |
|  | False | True | False |
|  | True | False | False |
|  |  |  |  |
|  | or |  |  |
|  | A | B | Output |
|  | True | True | True |
|  | False | False | False |
|  | False | True | True |
|  | True | False | True |
|  |  |  |  |
|  | not |  |  |
|  | A | B | Output |
|  | True | True | False |
|  | False | False | True |
| and condition | False | True | True |
| or condition | False | True | False |
| and condition | True | False | True |
| or condition | True | False | False |

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) ----output False

not (5 > 4) ----output False

(5 > 4) or (3 == 5) ----output True

not ((5 > 4) or (3 == 5)) ----output False

(True and True) and (True == False) ----output False

(not False) or (not True) ----output True

5. What are the six comparison operators?

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

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

Equal to a value in python is referred by == (comparison operator)

5 == 5

whereas just single equal to = is (assignment operator)

Value1 = 5

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')

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.

spam = 4

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?

Ctrl + c

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

Break terminates a loop whereas continue skips the current iteration

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

There is no difference

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 i in range (10):

print(i+1)

i = 0

while i in range (10):

print(i + 1)

i += 1

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

Import spam

A = spam.bacon()

Print A