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

* True
* False

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 evaluate ).

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

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?

* >
* <
* ==
* >=
* <=
* !=

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

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 = input()

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: it will stop executing the block code of the loop and exit the iteration of the loop.

continue: it will stop executing the next commands in the loop’s block code but continue from next iteration in the loop.

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

range(10): it will generate list of 10 iteration decimal numbers, starts by default with 0 and step of 1.

range(0,10):same above but we set start with 0.

range(0,10,1): same above but we set start with 0 and set step with 1.

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(1,11):

print(i)

# ===========

i = 1

while True:

if I > 10:

break

print(i)

i += 1

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

Method 1:

from spam import bacon

bacon()

#==========

Method 2:

import spam

spam.bacon()