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

True and False or 0 and 1

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 | B | A and B | A or B | A not B |
| True | True | True | True | False |
| True | False | False | True | False |
| False | True | False | True | False |
| False | False | False | False | 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?

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

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

Assignment operator uses a single “=” symbol while equal to uses two.

A = 5 assigns value 5 to variable A

A == 5 checks if the value stored in variable A is equal to the integer 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 = int(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 statement stops whatever loop it is enclosed in and proceeds to execute the rest of the program.

Continue on the other hand starts the next iteration of the loop

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

They yield exactly the same result

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(0,11):

print(i)

i=1

while(i<=10):

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?

spam.bacon()