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

True and False. First letter in caps

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

AND, OR and 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 ).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | AND | OR | NOT |
| 0 | 1 | 0 | 1 | 0 |
| 1 | 0 | 0 | 1 | 0 |
| 1 | 1 | 1 | 1 | 0 |
| 0 | 0 | 0 | 0 | 1 |

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) Value is 0 ie False

not (5 > 4) value is 0

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

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

(True and True) and (True == False)value is 0 ie False

(not False) or (not True) value is 1

5. What are the six comparison operators?

<,<=,>, >=,== and not

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 operator:

If a==b:

Print( “same”)

The above statement checks a condition whether a isequal to b.

Assignment Opertor:

a=b

The above statement assigns the value of b to a.

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 (“Enter a number: “))

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 will end the loop and exit from the loop.

Continue will end the execution and go back to the beginning of the loop.

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

range(10) means the maximum value till which the loop will execute is 10.

Range(0. 10) means the loop start value is 0 and end value is 10.

Range(0,10,1) means the loop start value is 0 end value is 10and increments by 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( i<=10):

print(i)

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

Spam.bacon()