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

* True
* False are the two values of the Boolean data type and both the word should start with capital letter .

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 ).

True & True = True.  
  
True & False = False.  
  
False & True = False.  
  
False & False = False.  
  
True or True = True.  
  
True or False = True.  
  
False or True = True.  
  
False or False = False.  
  
! True = 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.

The **==** operator will compare two values and evaluates to a Boolean and **=** is the assignment operator which stores a value in a variable.

7.Explain what a condition is.

**Conditions** are statements which evaluates actions in the program and evaluates if it's true or false.

8.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')

ANS:- The three blocks are everything inside the if statement and the lines print('bacon') and print('ham').

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

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?

Press ctrl+C

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

The **break** statement will terminate the current loop. while the **continue** statement is used to skip code within a loop after the code is skipped, the loop continues where it left off.

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

* The range(10) call ranges from 0 up to not including 10.
* The range(0,10) will tell the loop to start at 0.
* The range(0,10,1) will tell the loop to increase the variable by 1 on each iteration.

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)  
and:  
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?

Spam.bacon().