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

True and False : T and F

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 ).

True and True is True.  
  
True and False is False.  
  
False and True is False.  
  
False and False is False.  
  
True or True is True.  
  
True or False is True.  
  
False or True is True.  
  
False or False is False.  
  
not True is False.  
  
not False is 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?

==, !=, <, >, <=, and >=.

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

== is the equal to operator that compares two values and evaluates to a Boolean, while = is the assignment operator that stores a value in a variable, A condition is an expression used in a flow control statement that evaluates to a Boolean value.

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')

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')  
else if spam == 2:  
print('Howdy')  
else:  
print('Greetings!')

9.If your programme is stuck in an endless loop, what keys you’ll press?

Crtl+C

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

when break keyword comes, it terminates the execution of the current loop and passes the control over the next loop or main body, whereas when continue keyword is encountered, it skips the current iteration and executes the very 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), - start is optional. When not provided, it defaults to 0. It is the starting number of the sequence.

range(0, 10) - stop is mandatory. range will generate numbers up to but not including the value of stop.

range(0, 10, 1) - step is optional. When not provided, it defaults to 1. It is the difference between two elements in the sequence. It cannot be 0; in this case, a ValueError would be raised.

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.

Using while loop

i = 1

while(i<=10):

print(i)

i += 1

Using loop

For i in range(1,11);

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()