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

**True – 1,**

**False - 0**

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 ).

**0 and 0 = 0 0 or 0 = 0   
0 and 1 = 0 0 or 1 = 1   
1 and 0 = 0 1 or 0 = 1  
1 and 1 = 1 1 or 1 = 1**

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.

**Single equal sign (=) is assignment operator while double equal sign (==) is comparison operator.  
a=6 (assignment)  
a==6 (comparison)**

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')

**Correct code: (indent at bold lines)**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?

**break**

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

**Break ends the program and skips to next program line.  
Continue carries the program back to previous program line.**

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

**All these 3 statements represent same thing.**

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:**

**a=10**

**for i in range(a):**

**print (i+1)**

**if i==10:**

**break**

**While:  
a=0**

**while a<10:**

**a=a+1**

**print(a)**

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

**spam.bacon()**