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

True, False

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&b | a|b | !a |
| 0 | 0 | 0 | 0 | 1 |
| 0 | 1 | 0 | 1 | 1 |
| 1 | 0 | 0 | 1 | 0 |
| 1 | 1 | 1 | 1 | 0 |

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.

Equal operator is used to check the value is equal or not while assignment operator is used to assign a value to variable. Eg: a=10  
 a==10

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=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+z

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

Break will stop loop and move to next statement while continue will move to next condition.

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

Range(10): print the element from 0 to 9  
range(0,10): print the element from 0 to 9  
range(0,10,1): print the element from 0 to 9

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)  
 i=i+1

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