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

> The boolean value can be of two types only i.e. either True or False. we write true=1 & false = 0

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

>There are three basic Boolean search commands: 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 ).

| x | y | X OR Y |
| --- | --- | --- |
| 0 | 0 | 0 |
| 1 | 0 | 1 |
| 0 | 1 | 1 |
| 1 | 1 | 1 |
|  |  |  |
| x | y | X AND Y |
| 0 | 0 | 0 |
| 1 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 1 | 1 |
|  |  |  |
| X | NOT X |  |
| 1 | 0 |  |
| 0 | 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?

they are >, <, ==, !=, >= , <=

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

> ’=’ is an Assignment Operator it is used to assign the value of variable or expression, while == is an Equal to Operator and it is a relation operator used for comparison (to compare value of both left and right side operands)

c=a+b

a==b

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')

ham

spam

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 = 1

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?

>The main difference between both the statements is that 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) > 0,1,2,3,4,5,6,7,8,9

range(0,10) > 0,1,2,3,4,5,6,7,8,9

range(0,10,1)>0,1,2,3,4,5,6,7,8,9

so all are same

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, end=", ")

>>> i = 1

while i < 11:

print(i)

i += 1

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

​​>> This function can be called with spam.bacon().