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

0 and 1 are the two Boolean data type. it returns True and False and we use bool to represent it.

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).

x	y	and	or	x	not(its just an compliment)
0	0	0	0	0	1
0	1	0	1	0	1
1	0	0	1	1	0
1	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.

a = 5   (here we will use only one = so its an assignment operator)

a == 5 (here we are checking if a value is equal to 5 or not)

7. Identify the three blocks in this code:

spam = 0   assignment of value of spam

if spam == 10:   condition to check the value of spam

print('eggs')   print statement

```
if spam > 5:              condition to compare the value of spam

print('bacon')           print statement

else:                    if if condition is not True the print else

print('ham')             print statements

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?

ctrl +c or you can just re start the kernal , or use break in the code to stop it

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

break just stop the loop and continue just continues the next cycle .

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

there is no difference just in range(10) system will automatically get the initial point and the step size with is default that is 1. and initial point as 0.

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<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?

from spam import bacon