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

They are true and false. I write these two values in the following way: True and False.

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

They are AND, OR and NOT (and XOR).

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).

AND

0	0	0
0	1	0
1	0	0
1	1	1

And operator gives true if and only if both instances are true.

OR

0	0	0
0	1	1
1	0	1
1	1	1

Or operator gives true if and only if at least one of the instance is true.

NOT

0	1
1	0

Not operator turns false into true and vice versa.

XOR

0	0	0
0	1	1
1	0	1
1	1	0

Xor operator gives true if and only if one of the two instances 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?

Greater than >
Greater or equal than >=
Less than <
Less or equal than <=
Equal to ==
Different than !=

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 a specific condition, it is mostly used in if conditions:

```
a = input()
If (a ==5):
        print(a)
```
Assignment operator is used to assign an object (function, value, structure) to something like
a variable (for instance in the example above we assigned the function input() to a).

7. Identify the three blocks in this code: (I guess the indentation is correct)

spam = 0

```
if spam == 10:
        print('eggs')
if spam > 5:
        print('bacon')
else:
        print('ham')
        print('spam')
        print('spam')
```

The block are the 2 if and the else.
It would enter the else printing out the following lines:
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.

```
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?
Break is used to get out of a loop.
Continue is used to let the loop continues with the instructions if it is inserted in a specific condition.
Let's take the following piece of code:

```
name ="marcello"

for letter in name:
        if letter == 'l':
                continue
        print(letter)
```

It will print out:
m
a
r
c
e
o

11. In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?
range(10) allows us to loop within a range of 0,10
range(0,10) gives the same outcome. The difference is that we have access to the starting point and the ending point.
range(0,10,1) gives the same outcome. The difference is that we have access to starting point ,end point and the step.

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(1,11,1):
        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?
spam.bacon()