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

The two values of boolean data type are TRUE and FALSE. I write them in Python as 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).

AND TABLE

1	2	OUTPUT
True	True	True
False	True	False
True	False	False
False	False	False

OR TABLE

1	2	OUTPUT
True	True	True
False	True	True
True	False	True
False	False	False

1	OUTPUT
True	False
False	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?

Equal to ==
Not equal to !=
Greater Than >
Less Than <
Greater than or equal to >=
Less than or equal to <=

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

Assignment operator is described by = (single equal)
whereas equal to is described as == (Double equal)

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')
```

if block, if block and else block

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=[]
if 1 in spam:
    print('Hello')
elif 2 in spam:
    print('Howdy')
else:
    print('Greetings')
```

9.If your programme is stuck in an endless loop, what keys you'll press?

I will interrupt the kernel by pressing I,I

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

The command Break exits from the loop and goes to the next statement.
Whereas command continue exits from the current iteration of the loop and goes back to the top of the loop for next iteration.

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

```
for i in range(10):
        print(i)
Or
for i in range(0,10):
        print(i)
Or
for i in range(0,10,1):
        print(i)
```

Gives the values of i from 0 to 9
So there is no difference

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)

x = 1
while x<=10:
    print(x)
    x+=1
```

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

Import spam
From spam import bacon