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

Boolean Data type consists of two values: True or False. In Python, they can be assigned as *a = True* or *a = False*

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

The three Boolean operators in Python are *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).

A	B	A and B	A or B	Not A
False	False	False	False	True
False	True	False	True	True
True	False	False	True	False
True	True	True	True	False

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) ➔ False

not (5 > 4) ➔ True

(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?

a. Equal (==)

b. Not Equal (!=)

c. Greater than (>)

d. Greater than equal (>=)

e. Less than (<)

f. Less than equal (<=)

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

Assignment ➔ a = 10 (Assigning a value of 10 to the variable *a*)

Equal to ➔ a == 10 (Checking if the value assigned to a is equal to 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.

```python
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 ends the execution of current program. On linux, *Ctrl+Z* forcefully exits the Python interpreter abruptly.

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

Break is used to completely terminate a looping construct. Continue is used to skip the current iteration and start the next one.

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

range(10) ➜ *In a range of 0 (implicit, default =0) to 10 (explicit) in steps of 1 (implicit, default = 1)*

range(0,10) ➜ *In a range of 0 (explicit) to 10(explicit) in steps of 1 (implicit, default = 1)*

range(0,10,1) ➜ *In a range of 0(explicit) to 10(explicit) in steps of 1(explicit)*

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.

```
# Using For Loop
for i in range(1,11):
    print(i)

# Using While Loop
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

bacon()