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

Ans: True and False

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

Ans: 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).

Ans:

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?

Ans: 1.>,2. <,3. >=,4. <=,5. ==,6. !=

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

Ans: Equal operator is used for comparison while assignment operator is used to assign values

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.

Ans: 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?

Ans: Ctrl+C

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

Ans: break is used to terminate a loop prematurely, while continue is used to skip a specific iteration and continue with the next one.

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

Ans: There is no difference between range(10) and range(0, 10). They both create a sequence of numbers from 0 to 9.

The range(0, 10, 1) specifies the start value (0), the end value (10), and the step value (1) explicitly. It generates the same sequence of numbers as the first two, but with an explicitly defined step size.

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.

Ans: For loop

for i in range(1, 11):

   print(i)

while loop

i = 1

```
while i <= 10:

    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?

Ans: import spam

spam.bacon()