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
- We write them as True, False

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

- The three basic types of Boolean operators are 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 Operator:

A	B	A and B
0	0	0
0	1	0
1	0	0
1	1	1

Or operator:

A	B	A or B
0	0	0
0	1	1
1	0	1
1	1	1

Not Operator:

A	Not(A)
0	1
1	0

4. What are the values of the following expressions?

(5 > 4) and (3 == 5)

- Ans: False (or) 0

not (5 > 4)

- Ans: False (or) 0

(5 > 4) or (3 == 5)

- True (or) 1

not ((5 > 4) or (3 == 5))

- Ans: False (or) 0

(True and True) and (True == False)

- Ans: False (or) 0

(not False) or (not True)

- Ans: True (or) 1

5. What are the six comparison operators?

- The six comparison operators are **< (**Less than**), >(**Greater than**), ==(**Equals to**), <= (**Less than or equal to**), >=(**Greater than or equal to**), !=(**not Equals to**)**

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

- For equal to we use '==' to compare the variables
- For assigning a value to variable we use '='

Example:

- 3==3 (Comparison) -> gives True as output
- A = 3(assignment) -> gives value 3 when we call variable A

7. Identify the three blocks in this code:

1) spam = 0 ----> initializing the variable a first block of code

2) if spam == 10: ----> comparing the variable with required conditions for respective outputs

    print('eggs')

    if spam > 5:

    print('bacon')

    else:

    print('ham')

3) print('spam') ---> prints the outputs directly

    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 = 4
  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 will stop execution of loop where as continue will skip that line of execution of loop and starts with the execution of next iteration of loop

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

- In range(10), we didn't specify the starting index and increment by number, so by default it takes 0 as start , increment as 1 and output is (0-9)
- In range(0,10), we specify the starting index as 0 and as increment by is not provided by default it takes 1 as increment by and output is (0-9)
- In range(0,10), we specify the starting index as 0 and increment by is 1 as increment and output is (0-9)
- All 3 gives same output

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 = 0
  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?

- This function can be called with spam.bacon().