- 1. What are the two values of the Boolean data type? How do you write them?
- >>A variable of the primitive data type Boolean can have two values: **true and false**. Values in Python can be compared using comparison operations, and Boolean logic can be formulated with the use of logic operations.
- 2. What are the three different types of Boolean operators?

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).

Value1	Logical operator	Value2	Result
AND			
True	and	True	True
True	and	False	False
False	and	True	False
False	and	False	False
OR			
True	or	True	True
True	or	False	True
False	or	True	True
False	or	False	False
NOT			
	not	True	False
	not	False	True

4. What are the values of the following expressions?

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

Not
$$(5 > 4) \gg$$
 False

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

Not
$$((5 > 4) \text{ or } (3 == 5)) >> \text{False}$$

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

(Not False) or (not True) >>True

- 5. What are the six comparison operators?
- 1) Less than-<
- 2) Greater than ->
- 3) Equal to- ==

- 4) Not equal to -!=
- 5) Less than or equal to <=
- 6) Greater 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.

Equal To Operator	Assignment Operator	
It is designated by ==.	It is designated by =.	
It is used for comparing two values.	It is used to assign the value to the variable.	
Constant term can be placed at left hand side.	Constant term cannot be placed at left hand side.	

7. Identify the three blocks in this code:

```
spam = 0
if spam == 10: -----1
print('eggs')
if spam > 5: -----2
print('bacon')
else: -----3
print('ham')
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=int(input('Enter the value 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 statement stops the entire process of the loop. Continue statement stops the current iteration of the loop.

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

The output of all above will come same.

12. Write a short program that prints the numbers 1 to 10 using 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 = 1
    While i <= 10:
        <p>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?

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