

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

Ans: Boolean data type: **True, 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 evaluates).

AND		
INPUT1	INPUT2	OUTPUT
0	0	0
1	0	0
0	1	0
1	1	1
OR		
INPUT1	INPUT2	OUTPUT
1	0	1
0	1	1
0	0	0
1	1	1
NOT		
INPUT		OUTPUT
1		0
0		1

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: less than(<), greater than (>) , less than or equal to (<=), greater than or equal to (>=), equal to (==), not 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.

Ans: = is a assignment operator and == is a comparison operator or equal to. = **operator is used to assign value to a variable and == operator is used to compare two variable or constants.**

7. Identify the three blocks in this code:

Block1 :

```
spam = 0
```

Block2

```
if spam == 10:  
    print('eggs')
```

Block 3

```
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.

```
If store == 1:  
    print('Hello')  
elif store == 2:  
    print('Howdy')  
Else:  
    print('Greetings!')
```

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

Ans: break

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

Ans: The break and continue statement is used control or alter the loop. Break statement will end up in the innermost loop if it is used within a nested loop. While using the continue statement the loops do not terminate but continuously go on with the next iteration.

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

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=1  
n=10  
while i<=n:  
    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`?

Ans: `spam.bacon()`