

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

The two values are True and False.

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

These 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 ).**

<b>A</b>	<b>B</b>	<b>A AND B</b>
True	True	<b>True</b>
False	True	<b>False</b>
True	False	<b>False</b>
False	False	<b>False</b>

A table for AND Boolean operator

<b>A</b>	<b>B</b>	<b>A OR B</b>
True	True	<b>True</b>
False	True	<b>True</b>
True	False	<b>True</b>
False	False	<b>False</b>

A table for OR Boolean operator

<b>A</b>	<b>NOT B</b>
True	False
False	True

A table for NOT Boolean operator

#### 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?

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.

To assign a value to a variable, one will use assignment operator ( a = 5)

To check whether a value is true or false, one would use equal to operator

if a == 5:

    print(True)

#### 7. Identify the three blocks in this code:

##### Question

```
spam = 0
if spam == 10:
    print('eggs')
if spam > 5:
    print('bacon')
else:
    print('ham')
    print('spam')
    print('spam')
```

##### Solution

```
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.**

```
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 = it ends the loop or operation

continue = it skips the rest of the code

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

All three have 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):	i = 1
print(i)	while i < 11:
	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?**

spam.bacon()