

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

**True, False**

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

**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 ).

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?

**<, <=, >, >=, ==, !=**

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

**Equal is '=='. Using when you want to compare f.e. 4==4**

**Assignment is '='. Using when you want to assign variable to some values. x=4**

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.

```
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?

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

**Break stops the loop. Continue let's it go further.**

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

**Range(10). Iterating from 0 to 9 (included). Without specifying place to start (default is 0)**

**Range(0,10). Iterating from 0 to 9 (included). With specifying place to start - 0.**

**Range (0,10,1). Iterating from 0 to 9 (included). With specifying place to start and a number which iteration will go by. In this case 1.**

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
```

```
while i <11:
```

```
    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`?

**`spam.bacon()`**