

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

Two values of Boolean data types are true & false. It can be wrote with bool()

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

Boolean Or operator, Boolean And operator & Boolean Not operator

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 truth table

1. True and True : True

2. True and False : False

3. False and True : False

4. False and False : False

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) -> Error

(not False) or (not True) -> Error

5. What are the six comparison operators?

1. Less Than Operator (<)

2. Greater Than Operator (>)

3. Less Than or Equal to (<=)

4. Equal to or Greater Than (>=)

5. 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.

'=' is assignment operator, while '==' means equal to

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')
```

The code above had error result. We should use 1 tab for every "print" line). The result after the code correction code:

```
ham
spam
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("Input number for your 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? -> The break statement terminates the whole iteration of a loop while continue skips the current iteration

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

3 results are the same: range(0, 10)

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.

#### **USING A FOR LOOP**

```
for x in range(1,11):
```

```
    print(x)
```

```
else:
```

```
    print("")
```

#### **USING A WHILE LOOP**

```
a = 0
```

```
b = 10
```

```
c = 1
```

```
while a<b:
```

```
    print (c)
```

```
    c=c+1
```

```
    a=a+1
```

```
    if a==b:
```

```
        break
```

13. If you had a function named `bacon()` inside a module named `spam`, how would you call it after importing `spam`?

```
-> spam.bacon()
```