

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

True and False

True=1

False=2

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 ).

**NOT**

1 0

0 1

**And**

0 0 0

0 1 0

1 0 0

1 1 1

**Or**

0 0 0

0 1 1

1 0 1

1 1 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?

equal to, not equal to, greater than, greater than or equal to, less than, and less 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.

The "=" is an assignment operator that is used to assign the value on the right to the variable on the left. The '==' operator checks whether the two given operands are equal or not.

7. Identify the three blocks in this code:

```
spam = 0
```

**block1**

```
if spam == 10:
```

```
    print('eggs')
```

**block2**

```
if spam > 5:
```

```
    print('bacon')
```

**block3**

```
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.

```
spam=1
```

```
If spam ==1:
```

```
    print('Hello ')
```

```
If 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: Means it break the loop and exit the loop

Continue: But Continue it is used to skip the particular iteration

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

The code all give same output

**The syntax of the range is (starting, ending, step)**

**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.

**While LOOP**

```
i=1  
  
while i<11:  
  
    print(i)  
  
    i=i+1
```

**For LOOP**

```
for i in range(1,11):  
  
    print(i)
```

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

```
import spam  
spam.bacon()
```