

Assignment 2:

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

The 2 values of the Boolean data type are 'True' and 'false'.

True means 1 and False means 0.

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

Different types of logical operators are shown below.

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 to).

A	B	A&&B	A B	!A	!B
True	True	True	True	False	False
True	False	False	True	False	True
False	True	False	True	True	False
False	False	False	False	True	True

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.

Sign of equal to operator is '=='

Sign of assignment operator is '='.

Whenever we want to assign or store value to the variable we use assignment operator.

For example : a = 20;

Equal to operator use for comparison or checking the condition in our if-else statement, for loop and while loop.

For example : if a==10:

```
print('a is equal to 10')
```

7. Identify the three blocks in this code:

Here 3 blocks are separated in different color as shown below.

```
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 statement will terminate the loop in which it is used.

Whereas continue statement will skip that round and continue looping.

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

range(10) means (0-9) total 10 numbers.

range(0, 10) means starting from 0 and go till the 9. Number 10 is excluded.

range(0, 10, 1) means starting from 0 and go till number 10 and with 1 step forward.

These all will print same thing.

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 for loop:

```
For i in range(1,11):
```

```
    Print(i)
```

Using while loop:

```
i=0;
```

```
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()
```