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

The two values of the Boolean data type are “True” and “False.”

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

The three different types of Boolean operators are: and, or, not

1. 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

True: True ==> True

True: False ==> False

False: True ==> False

False: False ==> False

**Or** Truth Table

True: True ==> True

True: False ==> True

False: True ==> True

False: False ==> False

**Not** Truth Table

Not: True ==> False

Not: False ==> 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

1. What are the six comparison operators?

== Equal to

!= Not equal to

< Less than

> Greater than

<= Less than or equal to

>= Greater than or equal to

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

In python = is an assignment operator. This is used when assigning a value to a variable.

Eg: name = ‘Jeff’.

In the above statement, the = tells the python compiler to ‘assign’ the string ‘Jeff’ to the variable name.

The == operator is a comparison operator and it is used to see if two variables are equal to each other vis-a-vis the data contained in them. The expression involving the == operator resolves to either a True or a False value.

Eg:

name1 = ‘Jeff’

name2 = ‘Jeff’

If name1 == name2:  *#compares name1 with name 2 and checks if name1 is equal to name2*

Print (“same name”)

else:

Print(“The names differ”)

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')

1. 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 = input('Enter the value of spam: ')

if spam == '1':

print ('Hello')

elif spam == '2':

print ('Howdy')

else:

print ('Greetings!')

1. If your programme is stuck in an endless loop, what keys you’ll press?

Ctrl+C

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

**Break:**

* Leaves the loop
* Skips the remaining execution of the loop.
* If the condition always evaluates to true, it is useful.

**Continue:**

* Jumps for the next iteration.
* Skips execution of the remaining statement(s) inside the loop for the current iteration.
* Useful if one wants to skip execution of some statement(s) inside the loop for any particular iteration.

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

There is no difference in the output produced by the given different versions of the for loop.

* range(10) - instructs the compiler to start the iteration upto but not including 10.
* range (0,10) - this expression specifies the start value of the iteration, 0 in this case, and the loop will iterate upto but not include 10.
* range (0, 10, 1) - in this instance the range method has 3 parameters, the start value (0 - which is included in the loop), the stop value (10 - which is not included in the loop) and the step value indicating the difference between each integer in the sequence (1 - in the present example)

1. 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 <=10:

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()