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

True and False

capital T and F, with the rest of the word in lowercase.

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 ).

True and True = True  
True and False = False  
False and True = False  
False and False = False  
True or True = True  
True or False = True  
False or True = True  
False or False = False  
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

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.

= is the assignment operator that stores a value in a variable.

Ex- a = 5 ( where ‘a’ is variable, to which 5 will be assign so value of a will become 5 )

== operator checks whether the two given operands are equal or not. If so, it returns true. Otherwise it returns false

Ex -

5 == 5 (here 5==5 that is true)

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')

 Three blocks are everything inside the if statement and the lines print('bacon')

print('ham').  
print('eggs')  
if spam > 5:  
print('bacon')  
else:  
print('ham')  
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=int(input("Please enter a numebr"))

if spam==1:

print("Hello")

elif spam==2:

print("Howdy")

else:

print("Greeting")

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 : break statement will move the execution outside and just after a loop.

Continue : continue statement will move the execution to the start of the loop

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

No difference

They all do the same thing. The range(10) call ranges from 0 up to (but not including) 10, range(0,10) explicitly tells the loop to start at 0 , and range (0,10,1) explicitly tells the loop to increase or jump the variable by 1 on each iteration.

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)

i = 1

Using for while :

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?

This function can be called with spam.bacon().