1.What are the two values of the Boolean data type? How do you write them?  
 The Two values of Boolean data type are:- 1 and 0

For , these values we write:

True – 1 , False - 0

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

Different types of Boolean operator are:-

1. And Operator
2. Or Operator
3. 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 ).

1) And Operator

True and True = True

True and False = False

False and True = False

False and False = False

1. Or Operator

True or True = True

True or False = True

False or True = True

False or False = False

1. Not Operator

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?

The six comparison operators are :-

1. == (double equal to) – means equal to
2. < (Less Than)
3. > (Greater Than)
4. != (Not equal to)
5. <= (Less than or equal to)
6. >= (Greater 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.

When we use only one equal to sign (=) it is assignment operator . It Assign value of right side of expression to left side operand.

When we use two equal to sign (==) it is equal to operator . It is used to check whether 2 expressions give the **same value** .

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 following lines are blocks in code

1) - print(‘eggs’)

2) - print(‘Bacon’) and

3) - 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=input('Enter the spam value')

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?

If our programme is stuck in an endless loop You can stop an infinite loop with **CTRL + C.**

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

The difference between break and continue statement is when “Break” keyword is used, it will exit the loop . In case of “Continue” keyword, the current iteration that is running will be stopped, and it will proceed with the next iteration.

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

The function range(10) returns a sequence of numbers, starting from 0 by default, and increments by 1 (by default), and ends at 9.

The function range(0,10) returns a sequence of numbers, starting from 0 to 9 , as well but here 0 indicates the starting value.

The function range(0,10,1) returns a sequence of numbers, starting from 0 to 9 in increment value of 1.

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=1

while i <= 10:

print(i)

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().