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

Ans) Two values of the Boolean data type are “True” or “False”

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

Ans) The three different types of boolean operators are :

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 ).

Ans) True and True is True.  
  
 True and False is False.  
  
 False and True is False.  
  
 False and False is False.  
  
 True or True is True.  
  
 True or False is True.  
  
 False or True is True.  
  
 False or False is False.

Not False is True.

Not True is False

4. What are the values of the following expressions?

(5 > 4) and (3 == 5)

not (5 > 4)

(5 > 4) or (3 == 5)

not ((5 > 4) or (3 == 5))

(True and True) and (True == False)

(not False) or (not True)

Ans) (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?

Ans) The six comparison operators are:

== ; > ; <; >=; <=; =!

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

Ans) == is the equal to operator that compares two values and evaluates to a Boolean. For example: 4==5 ( which says is 4 is equal to 5 or not)

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

For example: x=10

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')

Ans) The three bolocks in this code are as below:

1) spam=0

2) if spam == 10:

print(“eggs”)

3) 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.

Ans) #The code:

spam=1

if spam == 1:

print('Hello')

elif spam == 2:

print('Howdy')

else:

print('Greetings!')

output: if spam = 1 it prints”Hello” or if spam=2 it prints “Howdy” or if spam = 3 it prints “Greetings”.

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

Ans) If my program is stuck in an endless loop . I will press the CTRL+C key.

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

Ans) The difference between break and continue is ‘break’ will stop the further execution after it will execute once .The ‘continue’ will not stop the running execution 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)?

Ans) range(10) --> it will displays all the numbers from 0 to 9

range(0,10) --> it displays all the numbers from 0 to 9

range(0,10,1) --> it displays all the numbers by jumping 1 number in middle here it displays 0 to 9 numbers by default it jumps 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.

Ans) For loop:

for i in range(1,11):

print(i)

while loop:

i = 1

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?

Ans) spam.bacon().