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

Answer-1. The two values of the Boolean data type are 1 and 0. We write them as true and false.

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

Answer-2. 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 ).

Answer-3. x y x AND y x OR y NOT x NOT y

0 0 0 0 1 1

0 1 0 1 1 0

1 0 0 1 0 1

1 1 1 1 0 0

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)

Answer-4. False

False

True

False

False

True

5. What are the six comparison operators?

Answer-5. Six comparison operators are:

* Equal to
* Not equal to
* Greater than
* Greater than or equal to
* Less than
* Less 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.

Answer-6. Assignment operators are used to assign values to variable and Equal to operators are use for comparison whether given values are equal or not.

Assignment operators: a = 10, b = 50

Here, ‘a’, ‘b’ is a variable to which we have assign values 10, 50.

Equal to operators: 5==3

Here we are comparing the given values.

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')

Answer-7. Three indented blocks are required in this code are:

spam = 0

if spam == 10:

print('eggs') # 1st indented block

if spam > 5:

print('bacon') # 2nd indented block

else:

print('ham') # 3rd indented block

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.

Answer-8.

spam= int(input("Input a number here: "))

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?

Answer-9. Press I twice.

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

Answer-10. Break is used to exit out of a loop but Continue is used to skip a part of loop when a condition is met.

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

Answer-11. No difference

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.

Answer-12. Program using for loop-:

for i in range(1,11):

print(i)

Program using while loop:

i=0

while True:

i+=1

print(i)

if i ==10:

break

13. If you had a function named bacon() inside a module named spam, how would you call it after importing spam?

Answer-13. First we create a function bacon() and save it as a file with name spam.py

#spam.py

def bacon(a,b):

return a\*b

Now we can import spam and then call function bacon()

import spam

print(spam.bacon(4,5))