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

Ans – Two values are True and False. We write in python is bool(True) and bool(False)

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

Ans – Three different types 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- Truth Table combination:

True and True = True

True or False = True

False or True = True

True or True = True

Not False = True

4. What are the values of the following expressions?

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

Ans - False

not (5 > 4)

Ans - False

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

Ans- True

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

Ans - False

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

Ans - False

(not False) or (not True)

Ans - True

5. What are the six comparison operators?

Ans – 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 – Equal to is used to compare the values and it return the output as 1 or 0

Assignment operator is used to assigning the value to a variable

1. a = 10

print(‘the value of a is ’+a)

1. a, b = 10, 20

if a == b:

print(“a is equal to b”)

else:

print(“a is not equal to b”)

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 – 3 blocks are :

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

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 : def myfunc(spam):

if spam == 1:

print('hello')

elif spam == 2:

print('howdy')

else:

print('greetings')

myfunc(1) = output hello

myfunc(2) = output howdy

myfunc(7) = output greetings

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

Ans : ctrl +c

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

Ans : break is used to immediately end the loop and continue will terminate the existing iteration and resume the next operation

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

Ans : There is no difference as all will give same output from 0 to 9

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

def count(n):

for i in range(n):

print(i)

count(10)

while loop

def count1(n):

i = 0

while(i<n):

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()