1. What are the Boolean data type's two values? How do you go about writing them?

Answer- True and False or 0 and 1 .bool(True) and bool(False)

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

Answer- 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-

AND OR Not

True and True- True True or True -True not True - False

True and False - False True or False - True not False - True

False and True - False False or True - True

False and Fale - False False or False -False

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 different types of reference operators?

Anser- Arithmetic , Logical, Identity, Assignment,Comparison and Bitwise Operator

6. How do you tell the difference between the equal to and assignment operators?

Answer- Equal operator - just assigns a value to a variable

Asssignment operator- it evaluates the value of both variable (a==b) and give true or false

7. Describe a condition and when you would use one.

Answer- Condition can be used to check whether the given block is True or False and they are used in If and while condition statement

8. Recognize the following 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 - Nested If else statement, it prints only spam because the conditions are all false

9. Create a programme that prints. If 1 is stored in spam, prints Hello; if 2 is stored in spam, prints Howdy; and if 3 is stored in spam, prints Salutations! if there's something else in spam.

Answer-

print("Type 1 for Hello , 2 for Howdy ,and anything else for Salutations!")

spam=int(input())

if spam ==1:

print("Hello")

elif spam == 2:

print("Howdy")

else:

print("Salutations!")

10.If your programme is stuck in an endless loop, what keys can you press?

Answer- Control + C

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

Answer- Break is used to exit or terminate the iteration when the condition is True

Continue is used to stop the current iteration when the condition is True and return the next iteration

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

Answer-- range(10) gives us the range up to 10

range(0,10) gives the range between 0 to 10

range(0,10,1) gives the range between 0 to 10 with a step value of 1

when used all the three in for loop all of them would fetch the same input

13. Using a for loop, write a short programme that prints the numbers 1 to 10 Then, using a while loop, create an identical programme that prints the numbers 1 to 10.

Answer-

for i in range(1,11)

print(i)

i=1

while(i<11):

print(i)

i+=1

14. If you had a bacon() function within a spam module, what would you call it after importing spam?

Answer- import spam

spam.bacon()