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

A: True and False are values of Boolean data types

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

A: 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: consider 0 as false and 1 as true

AND operator;

0 and 0 – False

0 and 1 – false

1 and 1 – true

1 and 0 – false

OR operator;

0 or 0 – false

0 or 1 – true

1 or 1 – true

1 or 0 – true

NOT operator

0 – true

1 – 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)): True

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

(not False) or (not True) : True

5. What are the six comparison operators?

Ans: 1. Less than <

2. Greater than >

3. Less than equal to <=

4. Greater than equal to >=

5. Equals to ==

6. Not equals to !=

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 an assignment operator whereas ‘==’ is equal to operator. ‘=’ is use to assign a value to variable whereas ‘==’ is use to check the condition where the variable is equals to the value. For example;

a = 5

b =7

if a==b:

print('a is equal to b')

else:

print('a is not equal to be')

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs') – No indendation

if spam > 5: - should be elif

print('bacon') – No idendation

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:

spam = 1

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?

CTRL+C

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

A: Break is use to exit from an existing loop whereas continue is use to continue the loop after skipping a step.

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

A: range(10):- Will print numbers from 0 to 9. Meaning it will print numbers upto index 10

Range(0,10)- numbers will start printing from index 0 and end with index 10.

Range(0,10,1) - numbers will start printing from index 0 and end with index 10 with a step 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.

for i in range(0,10):

print(i)

i = 1

while(i<=10):

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?

import spam

spam.bacon()