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

Answer 1: True and False. They are written as ‘True’, ‘False’

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

Answer 2: OR, AND, 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:

OR:

True or True = True

True or False = True

False or True = True

False or False = False

AND:

True and True = True

True and False = False

False and True = False

False and False = False

NOT

not(True) = False

not(False) = True

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 comparison operators?

Answer 5: >,<,>=,<=,==,!=

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:

Equal to operator: ‘==’

Assignment operator: ‘=’

When assigning a value to a variable, we use assignment operator.

When comparing two values/variables for equality, we use the equal to operator.

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs')

elif 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.

Answer 8:

spam = int(input("Enter a number"))

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: Interrupt kernel by pressing ‘I’ twice.

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

Answer 10: When break keyword comes, it terminates the execution of the current loop and passes the control over the next loop or main body.

When continue keyword comes, it skips the current iteration and executes the very next iteration in the loop.

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

Answer 11: In a for loop, there is no difference in the 3. range(10)= range(0, 10)= range(0, 10, 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.

Answer 12:

For Loop:

for i in range(1,11):

print(i)

While loop:

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?

Answer 13: spam.bacon()