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

Ans: True and False (True means 1 and False means 0 if any types of operations)

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

Ans: AND, 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).

Ans: 1 AND 1= 1, 1 AND 0 = 0, 0 AND 0 = 0

1 OR 1 = 1, 1 OR 0 = 1, 0 OR 0 =0

NOT 1 = 0, NOT 0 = 1

4. What are the values of the following expressions?

(5 > 4) and (3 == 5): 0

not (5 > 4): 0

(5 > 4) or (3 == 5): 1

not ((5 > 4) or (3 == 5)): 0

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

(not False) or (not True): True

5. What are the six comparison operators?

Less than (<) ...

Greater than (>) ...

Less than or equal to (<=) ...

Greater than or equal to (>=) ...

Equal to (==) ...

Not 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.

Ans:

Assignment operators (=): It is uses to assigning a value to the variables

Equal to operators (==): It is used for comparing two values. It returns 1 if both the values are equal otherwise returns 0.

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')

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.

spam = int(input(“Enter the values of spam: “))

if spam ==1:

print(“Hello”)

esif spam == 2:

print(“Howdy”)

else:

print(“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?

The main difference between both the statements is that when break keyword comes, it terminates the execution of the current loop and passes the control over the next loop or main body, whereas when continue keyword is encountered, 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)?

Ans:

range(10): 0 to 9

When user call range() with one argument, user will get a series of numbers that starts at 0 and includes every whole number up to, but not including, the number that user have provided as the stop

range(0,10) : 0 to 9

When user call range() with two arguments, user get to decide not only where the series of numbers stops but also where it starts, so user don’t have to start at 0 all the time. User can use range() to generate a series of numbers from X to Y using a range(X, Y)

range(0,10,1): 0 to 9

When user call range() with three arguments, user can choose not only where the series of numbers will start and stop but also how big the difference will be between one number and the next. If user don’t provide a step, then range() will automatically behave as if the step is 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.

Ans:

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?

Ans: spam.bacon()