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

**Answer:** True and False are the two values of Boolean data type, and they have to be written with the first letter in uppercase and the rest of the letter in the lower case like the beginning of this sentence.

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:**

| A | B | A and B |
| --- | --- | --- |
| True | True | True |
| False | True | False |
| True | False | False |
| False | False | False |

| A | B | A or B |
| --- | --- | --- |
| True | True | True |
| False | True | True |
| True | False | True |
| False | False | False |

4. What are the values of the following expressions?

**(Added my responses in the question itself)**

(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:** ==, !=, >, <, <=, >=

6. How do you tell the difference between the equal to and assignment operators?Describe a condition and when you would use one.

**Answer:**  Assignment operator contains only one sign(=) while the comparison operator has two signs(==). A condition helps in controlling which set of statements get executed, conditions are used with if else, while and so on.

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')

**Answer:**

Block 1: print('eggs')

Block 2: print('bacon')

Block 3:

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:**

if spam == 1:

print('Hello')

if spam == 2:

print('Howdy')

else:

print('Greetings!')

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

**Answer:** CTRL + C

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

**Answer:** Use of continue skips the current iteration of the loop while break terminates the loop itself.

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

**Answer:** There should be no difference since the given three ranges are the same.

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:**

for i in range(1, 11):

print(i)

using while:

i = 1

while i > 11:

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:** spam.bacon()