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

Ans: True, False

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

Ans: 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:

Truth table of ‘and’:

* True and True = True
* True and False = False
* False and True = False
* False and False = False

Truth table of ‘or’:

* True or True = True
* True or False = True
* False or True = True
* False or False = False

Truth table of ‘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?

* == equal
* != not equal
* > greater than
* < less than
* >= greater than or equal to
* <= less than or 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.

Equal to (==) is used within condition to check if something is equal to another or not. However, assignment operator (=) is used to assign a particular value to a variable.

* A=5 #this is assignment
* A==5 #this is equal to comparison

7. Identify the three blocks in this code:

spam = 0

if spam == 10: #block 1

print('eggs')

if spam > 5: #block 2

print('bacon')

else: #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.

spam=input()  
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?

Ans: Interrupt kernel to forcefully stop it

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

Ans: break is for getting out of a loop. continue is for continuing the loop further.

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

Ans: There is no difference. All the three will give exact same thing.

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 loop:

for i in range(1,11):  
 print(i)

While loop:

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?

import spam  
  
spam.bacon()