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

Two values of Boolean data type – True or False. True is represented by 1 and False is by 0

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

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).

|  |  |  |
| --- | --- | --- |
| A | B | C |
| TRUE | TRUE | TRUE |
| TRUE | FALSE | FALSE |
| FALSE | TRUE | FALSE |
| FALSE | FALSE | FALSE |
| TRUE | TRUE | TRUE |
| TRUE | FALSE | TRUE |
| FALSE | TRUE | TRUE |
| FALSE | FALSE | 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)) -False

(True and True) and (True == False) - False

(not False) or (not True) - True

5. What are the six comparison operators?

<, > , >=, <=, ==, !=

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 operator will compares the values & gives the result true or false.

Assignment operator will store the values in the variables

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')

Three blocks are:

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

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.

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?

Break will terminate the execution of the loop

Continue – here loop will not terminate, it will continue with the next statement.

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

The result of the 3 statement are same:

range(10) – will gives the values from 0 to 9(default start value is 0)

range(0,10) – will gives the values from 0 to 9

range(0,10,1) – will gives the values from 0 to 9, by incremental value 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(1, 11):  
print(i)  
  
and:  
  
i = 1  
while i <= 10:  
print(i)  
i = i + 1

13. If you had a function named bacon() inside a module named spam, how would you call it after importing spam?

def spam\_bacon ()

spam\_bacon ()