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

---True and False

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 ).

---and table:

A B A and B

|  |  |  |
| --- | --- | --- |
| False | False | False |
| True | False | False |
| True | True | True |
| False | True | False |

---or table:

A B A or B

|  |  |  |
| --- | --- | --- |
| False | False | False |
| True | False | True |
| False | True | True |
| True | True | True |

---not table:

A not A

|  |  |
| --- | --- |
| True | False |
| 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?

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

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

--- ‘=’ is assignment operator used to assign value to variable whereas ‘==’ is comaparision operator use for comparing two values, returns 1 if both are equal else 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')

---ham spam 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')

if 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 completely break through the loop ---Continue will move to next iteration of loop

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

--- (1). It will return 0 to 9 value. (2). Same as of first. (3). Same as of first or second so the ans will be 0 1 2 3 4 5 6 7 8 9

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.

---Using for loop: for i in range(1, 11):

print(i)

--- Using while loop:

i=1

while(i<11):

if i==11:

break

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?

--- spam.bacon()