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

ANS:- True and False are values of Boolean data type.

eg. flag = True

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

ANS:- AND ,OR , NOT are three types of boolean operators

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:-

* AND -

| x | y | x AND y |
| --- | --- | --- |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

* OR

| x | y | x OR y |
| --- | --- | --- |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

* NOT ➖

| x | NOT (x) |
| --- | --- |
| 0 | 1 |
| 1 | 0 |

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?

ANS: less than, greater than, less than or equal to, greater than or equal to, equal to, and 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:-

* equal to operator(==):- this operator checks whether two values are equal or not.

if they are equal it return as True, if not then it return False.

eg. x=y=6

x==y ⇒ True

* Assignment operator(=)

this operator assign the value to variable.

eg. x=9

print(x) ⇒ 9

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')

ANS:- hamspamspam

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.

ANS:-

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: CTRL + C

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

ANS:Break statement stops entire process of loop and continue stops only current iteration.next iteration can happen in that case.

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

ANS: range(10) - it gives no from 0 to 9 numbers

range(0,10) - it gives no from 0 to 9 numbers

range(0,10,1)- it gives no from 0 to 9 with the difference 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.

ANS: - for i in range(1,11)

print(i)

—----------------------------------------

i = 1

while(i<=10)

print(i)

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

ANS:- spam.bacon()