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

True or False 🡪 True is 1 , False is 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 ).

i)True, False(not True)

ii)True or False 🡪 True

True or True 🡪 True

False or False 🡪 False

False or True 🡪 True

iii) True And True 🡪True

True and False🡪 False

False and False 🡪 False

False and True 🡪 False

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) 🡪 False

not (5 > 4)🡪 True

(5 > 4) or (3 == 5)🡪 False

not ((5 > 4) or (3 == 5)) 🡪 True

(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 is with ‘==’ , eg: 4\*2 == 2\*4

Assignment happens by using only single ‘=’ . eg: a = 10, b= 20.

Code:

a = 2

b = 4

if a \*b== b\*a:

print (“this is comparison operater”)

else:

print (“this is assignment operator”)

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: Every if condition alignment needs to be given a space before it starts a statement,it gives an indentation error. There are two if conditions where indentation space is missing and also one else statement has a missing indentation space not give.

The code need to be aligned as follows.

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

else:

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('enter a value for 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?

Control + c

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

Break: It will completely stops the loop.

Continue : It skips the current loop, will skips after continue statement and continue the loop.

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

For range(10)🡪 it includes values from 0 to 9.

For range(0,10) 🡪 it includes values from 1 to 9 (excluding 0)

For range(0,10,1) 🡪 it includes values from 0 to 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.

For loop:

for i in range (0,11):

print (i)

while Loop:

i = 0

max = 10

while i < max :

i = i+1

print(i)

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

from spam import bacon

Bacon()