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

Ans: 0 and 1, False and True respectively.

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

Ans: not, and, or.

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 evaluates).

Ans: A ‘not’ A

True False

False True

A B A ‘and’ B

True True True

True False False

False False False

False True False

A B A ‘or’ B

True True True

True False True

False False False

False True True

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) Ans: False

not (5 > 4) Ans: False

(5 > 4) or (3 == 5) Ans: True

not ((5 > 4) or (3 == 5)) Ans: False

(True and True) and (True == False) Ans: False

(not False) or (not True) Ans: True

5. What are the six comparison operators?

‘==’, ‘! =’, ‘<’,’>’,’<=’ and ‘>=’, that is equal to, not equal to, less than, greater than, less than or equal to and greater 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.

Ans: ‘==’ is equal to and ‘=’ is assignment operators. Equals to is used for to evaluate the truthiness of a value 5+1==6, assignment operator is used to assign value to variables like spam=0, spam=10 etc.

7. Identify the three blocks in this code:

Block 1[spam = 0

if spam == 10:

print('eggs')]

Block 2[if spam > 5:

print('bacon')

else:

print('ham')]

Block 3[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= int(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: ctrl + c

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

Ans: break eliminates the remaining part of the iterable, continue eliminates the current iteration and executes the next part of the body.

break

for val in 'break':

if val=='e':

break

print(val)

print('it\'s a break')

Output will be

b  
r  
it's a break

Continue

for val in 'continue':

if val=='t':

continue

print(val)

print('it\'s a continue')

Output will be

c  
o  
n  
i  
n  
u  
e  
it's a continue

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 among range(10), range(0,10) and range(0,10,1) , it is only representation (start, stop, step by), where start and step by are by default 0 and 1 if not mentioned.

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:

num=1

while 1<=num<11:

print(num, end='')

num=num+1

for x in range(1,11):

print(x,end='')

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

Import bacon from spam