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

Sol: True

False

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

Sol: 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 ).

Sol: AND:

A B A AND B

False False False

True False False

False True False

True True True

OR:

A B A AND B

False False False

True False True

False True True

True True True

NOT:

A NOT

False True

True False

4. What are the values of the following expressions?

(5 > 4) and (3 == 5)

not (5 > 4)

(5 > 4) or (3 == 5)

not ((5 > 4) or (3 == 5))

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

(not False) or (not True)

Sol: False

False

True

False

False

True

5. What are the six comparison operators?

Sol: <, >, <=, >=, ==, !=

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

Sol: Difference between equal to and assignment operators is equal has ‘==’ and assignment has ‘=’. When we want to compare we want to use ‘==’ and when we want to assign’=’.

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')

sol: Block1:

if spam == 10:

print('eggs')

Block2:

if spam > 5:

print('bacon')

Block3:

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.

Sol: 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?

Sol: CTRL+C

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

Sol: if break occurs it end the loop but if continue occurs it skip that iteration and go to the next iteration.

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

Sol: there is no difference between them in for loop they act similar

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.

Sol: for i in range(1,11):

   print(i)

i=0;

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?

Sol: spam.bacon()