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

True

False

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

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 evaluate ).

OR:

TRUE OR FALSE=TRUE

FALSE OR TRUE=TRUE

TRUE OR TRUE=TRUE

FALSE OR FALSE=FALSE

AND

TRUE AND FALSE=FALSE

FALSE AND TRUE=FALSE

TRUE AND TRUE=TRUE

FALSE AND FALSE=FALSE

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?

Less than(<)

Less than equl to(<=)

Greater than(>)

Greater than equal to (>=)

Not equal to(!=)

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.

Assigment operator: this operator is used to assign the value to tha variable.

Symbol(=)

Example: var=”xyz”, here we are assigning the value “xyz” to variable var.

Equal to oepartor is used to do comparison between two operands .

Symbol(==)

Example: a=10

b=11

a==b

this will return False. Since a is not equal to b.

7. Identify the three blocks in this code:

spam = 0

if spam == 10: = Block 1 started

print('eggs')

if spam > 5: = block2 started

print('bacon') = block 2 ended

else: =block 1 ended

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=int(input("Enter value of spam : "))

if spam==1:

print("Hello")

elif spam==2:

print("Howdy")

else:

print("Greeting!")

9.If your programme is stuck in an endless loop, what keys you’ll press?

Ctrl+c

We can use break keyword also

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

Break keyword will stop the execution of current loop completely and passes the control to the next loop.

The continue keyword terminates execution of the statements within the loop and continue the loop in next iteration.

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

range(10)=(0,9). Dataset from 0 to 9 it will iterate through eact elemet

ex: **for** i **in** range(10):

print(i)

output:

0

1

2

3

4

5

6

7

8

9

range(0,10)= dataset from o to 9 excluding upper bound and will iterate through each element.

Output:

0

1

2

3

4

5

6

7

8

9

Range(0,10,1)=dataset from 0 to 10 excluding upper boud that is 10 with alternate of 1.

Output:

0

1

2

3

4

5

6

7

8

9

Hence there is no difference in the output in for loop for all three range().

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(11):

print(i)

using while loop:

a=1

b=10

while a<=b:

print(a)

a+1

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

spam.bacon()