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,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 ).

AND

X 0 0 1 1

Y 0 1 0 1

XY 0 0 0 1

OR

X 0 0 1 1

Y 0 1 0 1

XY 0 1 1 1

NOT

X 0 1

X' 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?

Less than (<)

Less than or equal to (<=)

Greater than (>)

Greater than or equal to (>=)

Equal to (==)

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.

The equal (==) double equal to operator is used to compare two or more than two values.

and The equal(=) operator is used to assign value to variable.

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')

>>ham

>>spam

>>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 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?

>> Ctrl + C

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

"continue " skips the remaining code within the loop for the current iteration

"break" is used when you want to stop into loop iteration

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

range(10) >>specify stop if only one arguement is given.

range(0,10) >> specify start and stop both arguement

and in range(0,10,1)>> specifing start stop and step arguement where 0 is start , 10 is stop and 1 is step.

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.

PRINTING 1 TO 10 USING WHILE LOOP

num = 1

while num <= 10:

print(num)

num+=1

PRINTING 1 TO 10 USING FOR LOOP

for i in range(11):

print(i)

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

>>first of all I will import the spam module and after that call it like that

>> spam.bacon()