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

Answer: True and False

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

Answer: AND,OR and 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 ).

Answer: OPERATOR OR AND NOT

TRUE TRUE = TRUE TRUE FALSE

TRUE FALSE = TRUE FALSE FALSE

FALSE TRUE = TRUE FALSE TRUE

FALSE FALSE = FALSE FALSE TRUE

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? <,>,<=,>=,==,!=

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

Single ‘=’ is assigning a value.

A=5

‘==’ is checking whether whether the 2 types match. A==B

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')

Output:

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.

Code:

b=input("Enter a number")

a=int(b)

if a==1:

print("Hello")

elif a==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?

Break: Once the condition is met it breaks the current loop and passes the control to the next loop or statement.

Continue: It skips the current iteration and executes the next iteration.

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

range(10) – Counts is 10 ,

range(0, 10) – starts from 0 to 10

range(0, 10, 1) – starts from 0 to 10 and skips the index by 1 position.

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(10):

print(i)

While Loop

i=1

while(i<10):

print(i)

i+=1

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

Spam.bacon()