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 evaluates).

**ANSWER:**

TRUE and TRUE = TRUE

TRUE and FALSE = FALSE

FALSE and FALSE = FALSE

FALSE and TRUE = FALSE.

TRUE or TRUE = TRUE

TRUE or FALSE = TRUE

FALSE or TRUE = TRUE

FALSE or FALSE = FALSE

NOT TRUE = FALSE

NOT FALSE = TRUE

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)

**ANSWER:**

False , False , True , False , False , True

5. What are the six comparison operators?

**ANSWER:** == , != , > , < , <= and >=

6. How do you tell the difference between the equal to and assignment operators? Describe a

condition and when you would use one.

**ANSWER:** == is the equal to operator that compares two values and evaluates to a Boolean, while = is the assignment operator that stores a value in a variable.

A condition is an expression used in a flow control statement that evaluates to a Boolean value.

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”)

**ANSWER:**

print (“bacon”) and print (“ham”)

print (“eggs”)

If spam > 5:

Print (“bacon”)

else:

Print (“ham”)

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.

**ANSWER:**

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?

**ANSWER:** ctrl + c

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

**ANSWER:** The break statement will move the execution outside and just after a loop. The continue statement will move the execution to the start of the loop.

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

**ANSWER:**

The range(10) calls range from 0 up to 10 (not including 10).

The range(0,10) tells the loop to start at 0.

The range(0,10,1) tells the loop to increase the variable by 1 on each iteration.

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.

**ANSWER:**

for i in range(1,11):

print(i)

I = 1

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?

**ANSWER:** spam.bacon()