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

The two values in the Boolean data type are True and False. Sometimes you can also call it by 0 or 1.

e.g. a = True, b = False

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

The three different types of Booleanoperators are 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.**

1 and 1 = 1

1 and 0 = 0

0 and 1 = 0

0 and 0 = 0

1 or 1 = 1

1 or 0 = 1

0 or 1 = 1

0 or 0 = 0

Not 1 = 0

Not 0 = 1

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)

**5. What are the six comparison operators?**

Six comparison operators are less than, greater than, less than or equal to, greater than or equal to, equal to and 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.**

For example

if a == 10 :

print(“The number is equal to 10”)

Here, == operator is the comparison operator where the interpreter compares the value of a to 10.

a = 10

here, = is the assignment operator where 10 is assigned as a value to a 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')

**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 the value of 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?**

Break – Break is a word which is usually used to come out of the loop if you are hitting any condition.

Continue – Continue is the word which is used to skip a particular condition while the program is in inside of the loop.

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

range(10) – it runs the loop from 0 to 10 with an increment value of 1 as a default. As it starts with 0 it is not always compulsory to give 0 as a starting value python automatically takes it as 0 by default.

range(0, 10) – it runs the loop from 0 to 10 with an increment value of 1 as a default.

range(0, 10, 1) – it runs the loop from 0 to 10 with the increment of 1. As 1 is given as a step value it is not always compulsory to mention step value if you are not mentioning than also it will take 1 as a default.

**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(1,11):

print(i)

**Using while loop:**

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?**

This function can be called by spam.bacon()