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

# True and False are the two values of the boolean data type and using capital T and F, with the rest of the word in lowercase

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

# and, or, and not are the different types of boolean operators

1. 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 ).

# True and True is True. True and False is False. False and True is False. False and False is False. True or True is True. True or False is True. False or True is True. False or False is False. not True is False. not False is 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.

# == 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.

# If we want to compare the values of two variable then we will use equal to operator . For ex

# a = 1,b =1 then to compare we will use a==b in if statement or as required.

# If we want to assignment one value to another , then we will use assignment operator. For ex

# a =1, then to assignment to b, use a=b. It will give the value of b as 1.

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')

# The three blocks are everything inside the if statement and the lines print('bacon') and print('ham'). print('eggs') if spam > 5: print('bacon') else: print('ham') print('spam')

1. 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.

# if spam == 1: print('Hello') elif spam == 2: print('Howdy') else: print('Greetings!')

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

# Press CTRL-C to stop a program stuck in an infinite loop.

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

# Break Statement

# The 'break 'stop the continuation of the loop.

# Continue Statement

# The 'continue' does not stop the continuation of loop and it stops the current.

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

 range function in python accepts 3 parameters start, stop, and step. start is optional and  specifies which position to start ,stop is where the loop stops the iteration and step is also optional which indicates the direction of the iteration. So in above case three of them range(10) ,range(0,10) and range(0,10,1) will be giving same output provided they are given same exact conditions just that the third one is more specified then second then first

1. 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 is -

# for i in range(1, 11):

# print(i)

While loop is -

# i = 1

# while(i<=10):

# print(i)

# i += 1

1. 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 with spam. bacon()