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

=> True, False

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

=> or, and, not

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 ).

=> a = [0, 0, 1, 1], b = [0, 1, 0, 1]

a or b = [0, 1, 1, 1]

a and b = [0, 0, 0, 1]

not 0 = True

1. 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

1. What are the six comparison operators?

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

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

=> equal to is used to check values are equal or not represent by == sign

=> assignment operator is used to assign a value in to a variable represent by = sign

1. Identify the three blocks in this code:

#Start Block1

spam = 0

# End Block1

# Start Block2

if spam == 10:

print('eggs')

# End Block2

# Start Block3

if spam > 5:

print('bacon')

else:

print('ham')

print('spam')

print('spam')

#End Block3

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?

=> stop key in jupyter

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

=> In a loop, if condition is fulfilled before completing the loop limit then we can use break to stop further looping the it will save time.

=> In a loop, if one condition is fulfilled and second condition yet to complete before completing the loop limit then we can use continue to continue further looping until the second condition will not true.

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

=> range(10) = 0,1, 2,……9

range(0,10) = 0,1, 2,……9

range(0,10, 1) = 0,1, 2,……9

Means all are same

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.

=> code1

for i in range(1,11):

print(i)

=> code2

i = 1

while i <=10:

print(i)

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

=> import spam

spam.bacon()