1. The else statement belongs to the inner if statement.

Reason: The inner if statement is executed as the outer if condition is true. If the inner if condition is false, the else statement is executed.

1. foo

Reason: when the function foo is executed, it returns false. This means that the if condition, carrying the logical and operator, fails as it is dealing with a false condition so the program stops before calling the bar function.

1. Nothing changes

Reason: for loop will take the next value from the specified range and not the variable from the if statement modified by us, even if the condition is true.

1. By using the list comprehension method, we can gather all the tuples which match the condition

res = [tup for tup in tuples\_list if tup[0] in target\_set]

print (res)

o/p: [(1, “a”) , (3, “c”) , (1, “d”)]

1. No. A set cannot contain tuples with mutable elements like lists as such tuples are not hashable and sets cannot contain unshable elements.

my\_set = { (1, [2, 3]) }

Running this code, will create a TypeError stating that it is unhashable.

To avoid this, we can convert the elements into hashable type by replacing the list with a tuple.

my\_set = { (1, (2, 3)) }

1. The loop runs infinitely as the condition while x! = 1.5 always remains true.

Reason: the representation of decimal fractions in computers are not always accurate as they use a binary system in which, floating point numbers are just approximations.