

Ques1- the else belongs to the if which it follows, that is the inner if condition as else can not exist on its own, it always follows an if statement and that too its immediate if. It follows the if which comes in the same indentation as else.

Ques2- the output is foo, as when foo() and bar() is called, where foo() is called first, so it goes in foo() fn and prints foo and then returns False. We know whenever False is put with and logic, then it always returns False, that's why bar() fn never runs and 'hello' is not printed.

Ques3- in this case, even after modification, nothing is changed.

Ques6- the loop runs infinitely as in float 1.5 exact value is never reached, an approximate value very close to 1.5 comes but the exact value doesn't come and hence it iterates over and over again till infinity.

Ques5- no, a set can not contain tuples which contains list because sets contain fixed and unique elements, which is possible only if the elements in a tuple are hashable, also which is not possible in case of mutable data like lists in tuples. In order to change this, we can change the list to a tuple or a set. If we create a set like that, it will produce type error of unhashable data like lists.