Problem 3:

1. The expression is considered truthy if the module executed initially is the module that holds the statement, and it is considered false when it's imported to another module.
2. The problem that we try to solve is the execution of unintended code when importing a python module. When the module is imported only the code inside the statement gets executed.
3. The scope of the variable, say, x, that was assigned inside the if statement still has a global scope. This is because if statements do not create an inner scope inside them and this if statement is in the global scope of the module. Since it is a global variable it would live for the entire execution of the module as long as the statement is true, which impacts my choice of creating variables inside that specific if statement. This is because I would not want to have global variables in the module as it is a bad design technique, unless it is extremely necessary, specially inside an if statement.