

The equals method in the “PersonWithJob” is overridden such that the implementations of equals uses instanceof to check the type of the argument and it lead to non-symmetric definitions of equals. A definition of the equals method should be reflexive, symmetric, and transitive, and a violation of the equals contract may lead to unexpected behavior. To address this problem, we used composition instead of inheritance such that the “PersonWithJob” forwards requests for Person functionality to the composed class Person.