**Explanation of Question Prob-1**

Here , we are observing that , there are two instance :

Person p1 = new PersonWithJob("Joe", 30000);

Person p2 = new Person("Joe");

p1.equals(p2) : false. the reason is

it(P1) holds the object of PersonWithJob. PersonWithJob is a child class of Person class. So it(P1) is the instanceOf Person Class but Person is not the instanceOf PersonWithJob class.

as a consequence p1.equals(p2) statement delivers false.

p2.equals(p1) : true. the reason is

as P2 holds the object of parent class Person and P1 holds the object of Child class PersonWithJob. so, P1 is always the instanceOf it's parent P2. moreover equality was checked based on name attributes. as a result, p2.equals(p1) statement returns true.