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Q1.

Ans: P1 was created with PersonWithJob, which is a subclass of Person, both Person and PersonWithJob override the equals() method with different implementations, so comparing the P1 which is an instance of PersonWithJob class, uses the override method in the PersonWithJob class, and that compares both names and salary, and our second object P2 doesn't have salary, hence the compare returns false;

Q2. In code attachment

3A. The use of inheritance relationship does not make sense in here because firstly, it fails the IS-A check, it also fails the Liskov Substitution Principle (LSP) as we cannot substitute circle in place of a cylinder.

3B. Solution is attached to code.

4.