

## **Java Bank Project – Question Statements**

1. Design a simple Bank Management System using Java and Object-Oriented Programming concepts.
2. Create a base class Account with common fields like account holder name, account number, and balance. Include deposit and withdraw methods.
3. Create two subclasses: SavingsAccount and CurrentAccount, inheriting from Account. Add specific properties like interest rate and overdraft limit.
4. Override the withdraw() and displayDetails() methods in both subclasses to demonstrate runtime polymorphism.
5. Use access modifiers (private, protected, public) appropriately to implement encapsulation.
6. Implement a main class to create objects of SavingsAccount and CurrentAccount, and perform deposit, withdrawal, and display operations.
7. Demonstrate the use of constructor chaining using super() to initialize base class members from child classes.
8. Use typecasting to access subclass-specific methods using a base class reference.
9. Ensure that the project shows proper code reuse through inheritance and maintains clean modular structure.
10. Optional: Add functionality to calculate and apply interest for savings accounts.