Exercise Description

Exercise: Design a simple banking system that involves different types of accounts (general, checking, and savings). Implement the following requirements:

1. **Base Account Class**:

   - Create a class `Account` with attributes for the account balance and the account holder's name.
   - Provide methods for depositing funds and printing account information.

2. **Savings Account**:

   - Extend the `Account` class to create a `SavingsAccount.`
   - Add an interest rate attribute, and implement a method to apply interest to the balance.
   - Ensure that the account information includes the interest rate when printed.

3. **Checking Account**:

   - Extend the `Account` class to create a `CheckingAccount.`
   - Track the number of transactions, and charge a fee after more than three transactions.
   - Ensure that the account information includes the transaction counter when printed.

4. **Bank Class**:

   - Create a `Bank` class that manages multiple accounts using an `ArrayList.`
   - Implement methods to add new accounts and print details of all accounts.

5. **Main Program**:

   - Write a main method that creates and tests the functionality of regular accounts, savings accounts, and checking accounts.
   - Perform operations like deposits and print the details to verify that everything works as expected.

Requirements:

- Implement and test the behavior of each account type (base, savings, checking).
- Demonstrate the correct application of interest and transaction fees in the program's output.