

Create an abstract class called BankAccount. The BankAccount class should have the following abstract methods:

void deposit(double amount) - Deposit the given amount into the account.

void withdraw(double amount) - Withdraw the given amount from the account.

double calculateInterest() - Calculate and return the interest earned on the account.

Then, create two subclasses of BankAccount:

SavingsAccount - This class should implement the calculateInterest() method to calculate the interest earned based on the balance and a fixed interest rate.

CheckingAccount - This class should implement the withdraw() method to allow withdrawals up to a certain limit without any fee, but charge a fee for withdrawals beyond that limit.

Additionally, create a main class to test your implementations by creating instances of SavingsAccount and CheckingAccount, performing various operations like deposits, withdrawals, and calculating interest.