```
package iusb.C201.bank.transaction;

import java.util.Scanner;

import iusb.C201.bank.analysis.transactionRecord;

import java.io.*;
import java.util.ArrayList;
import java.text.SimpleDateFormat;
import java.util.Date;

public class bankTransaction {
	private String accountDB;
	private String transactionDB;
	private ArrayList accounts;

	public bankTransaction(String accountDB, String transactionDB) {
		this.accountDB = accountDB;
		this.transactionDB = transactionDB;
		accounts = new ArrayList<account>();
	}

	public void loadDB() throws IOException {
		File file = new File(accountDB);
		Scanner inFile = new Scanner(file);

		while (inFile.hasNext()) {
			int act = inFile.nextInt();
			String fn = inFile.next();
			String ln = inFile.next();
			double balance = inFile.nextDouble();

			account a = new account(act, fn, ln, balance);
			accounts.add(a);
		}
		inFile.close();
	}

	private account searchAccount(int actNum) {
		for (int i = 0; i < accounts.size(); i++) {
			account a = (account) accounts.get(i);
			if (a.getAccountNumber() == actNum)
				return a;
		}

		return null;
	}

	public void deposit() throws IOException {
		Scanner input = new Scanner(System.in);
		System.out.print("Please enter the account Number: ");
		int act = input.nextInt();

		System.out.print("Please enter the amount: ");
		double amount = input.nextDouble();

		account a = searchAccount(act);
		if (a != null) {
			a.deposit(amount);
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                  /*
                   * Your code goes here Call method recordTransaction() to save
this transaction
                   */
                  recordTransaction(act, 'D', amount);
            } else
                  System.out.println("Account not found.");
      }

      public void withdraw() throws IOException {
            Scanner input = new Scanner(System.in);
            System.out.print("Please enter the account Number: ");
            int act = input.nextInt();

            System.out.print("Please enter the amount: ");
            double amount = input.nextDouble();

            account a = searchAccount(act);
            if (a != null) {
                  if (a.withdraw(amount) == true) {
                        /*
                         * Your code goes here Call method recordTransaction() to
save this transaction
                         */
                        recordTransaction(act, 'W', amount);
                  } else
                        System.out.println("no enough balance.");
            } else
                  System.out.println("Account not found.");
      }

      public void saveDB() throws IOException {
            FileWriter fw = new FileWriter(accountDB);

            for (int i = 0; i < accounts.size(); i++) {
                  account a = (account) accounts.get(i);
                  int act = a.getAccountNumber();
                  String fn = a.getFirstname();
                  String ln = a.getLastname();
                  double balance = a.getBalance();

                  fw.write(act + "\t" + fn + "\t" + ln + "\t" + balance + "\n");
            }
            fw.close();
      }

      void recordTransaction(int actNum, char type, double amount) throws
IOException {
            /*
             * Your code goes here: 1. Open transaction record database
(transactionDB file)
             * 2. Write the transaction (account number, transaction type, amount
of money,
             * and current time) to file (database) as one line of record 3. Close
the file
             * stream (FileWriter)
             */
            String currentTime = new
SimpleDateFormat("yyyy.MM.dd.HH.mm.ss").format(new Date());
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            File file = new File(transactionDB);
            FileWriter fw = new FileWriter(file, true);

            fw.write(actNum + "\t" + type + "\t" + amount + "\t" + currentTime + "\
n");

            fw.close();
      }
}
```