**import** java.io.IOException;

**import** java.text.DecimalFormat;

**import** java.util.HashMap;

**import** java.util.Map.Entry;

**import** java.util.Scanner;

**public** **class** OptionMenu **extends** Account{

Scanner menuInput = **new** Scanner(System.***in***);

DecimalFormat moneyFormat = **new** DecimalFormat("'$'###,##0.00");

HashMap<Integer, Integer> data = **new** HashMap<Integer, Integer>();

**public** **void** getLogin() **throws** IOException {

**int** x = 1;

**do** {

**try** {

data.put(12345, 4567);

data.put(23456, 5678);

System.***out***.println("Welcome to the ATM Project!");

System.***out***.println("Enter Your Customer Number: ");

setCustomerNumber(menuInput.nextInt());

System.***out***.println("Enter Your PIN Number: ");

setPinNumber(menuInput.nextInt());

}**catch** (Exception e) {

System.***out***.println("\nInvalid character(s). \nOnly numbers accepted.\n");

x = 2;

}

**for** (Entry<Integer, Integer> entry : data.entrySet()) {

**if**(entry.getKey() == getCustomerNumber() && entry.getValue() == getPinNumber()) {

getAccountType();

}

}

System.***out***.println("\nWrong Customer Number or PIN Nuber.\n");

}**while**(x == 1);

}

**public** **void** getAccountType() {

System.***out***.println("Select The Account You Want to Access: ");

System.***out***.println();

System.***out***.println("Type 1 - Checking Account");

System.***out***.println("Type 2 - Saving Account");

System.***out***.println("Choice: ");

selection = menuInput.nextInt();

**switch** (selection) {

**case** 1:

getChecking();

**break**;

**case** 2:

getSaving();

**break**;

**case** 3:

System.***out***.println("Thank You for Using This ATM, Visit Again....");

**break**;

**default**:

System.***out***.println("\nInvalid Choice.");

getAccountType();

}

}

**public** **void** getChecking() {

System.***out***.println("Checking Account: ");

System.***out***.println("Type 1 - View Balance");

System.***out***.println("Deposit Funds");

System.***out***.println("Choice: ");

selection = menuInput.nextInt();

**switch**(selection) {

**case** 1:

System.***out***.println("Checking Account Balance: " + moneyFormat.format(getCheckingBalance()));

getAccountType();

**break**;

**case** 2:

getCheckingWithdrawInput();

getAccountType();

**break**;

**case** 3:

getCheckingDepositInput();

getAccountType();

**break**;

**case** 4:

System.***out***.println("Thank You for Using This ATM, Visit Again....");

**break**;

**default**:

System.***out***.println("\nInvalid Choice.");

getChecking();

}

}

**public** **void** getSaving() {

System.***out***.println("Saving Account:");

System.***out***.println("Type 1 - View Balance");

System.***out***.println("Type 2 - Withdraw Funds");

System.***out***.println("Type 3 - Deposit Funds");

System.***out***.println("Type 4 - Exit");

System.***out***.println("Choice: ");

selection = menuInput.nextInt();

**switch**(selection) {

**case** 1:

System.***out***.println("Checking Account Balance: " + moneyFormat.format(getCheckingBalance()));

getAccountType();

**break**;

**case** 2:

getCheckingWithdrawInput();

getAccountType();

**break**;

**case** 3:

getCheckingDepositInput();

getAccountType();

**break**;

**case** 4:

System.***out***.println("Thank You for Using This ATM, Visit Again....");

**break**;

**default**:

System.***out***.println("\nInvalid Choice.");

getChecking();

}

}

**int** selection;

}