**ATM OPERATIONS**

public class ATM {

private double balance;

private Scanner scanner;

public ATM() {

this.balance = 0.0;

this.scanner = new Scanner(System.in);

}

public void start() {

boolean running = true;

while (running) {

System.out.println("\nWelcome to the ATM!");

System.out.println("1. Check Balance");

System.out.println("2. Deposit Money");

System.out.println("3. Withdraw Money");

System.out.println("4. Exit");

System.out.print("Choose an option: ");

int choice = scanner.nextInt();

switch (choice) {

case 1:

checkBalance();

break;

case 2:

depositMoney();

break;

case 3:

withdrawMoney();

break;

case 4:

running = false;

System.out.println("Thank you for using the ATM. Goodbye!");

break;

default:

System.out.println("Invalid option. Please try again.");

}

}

scanner.close();

}

private void checkBalance() {

System.out.printf("Your current balance is: $%.2f\n", balance);

}

private void depositMoney() {

System.out.print("Enter the amount to deposit: ");

double amount = scanner.nextDouble();

if (amount > 0) {

balance += amount;

System.out.printf("$%.2f has been deposited. Your new balance is: $%.2f\n", amount, balance);

} else {

System.out.println("Invalid deposit amount. Please enter a positive amount.");

}

}

private void withdrawMoney() {

System.out.print("Enter the amount to withdraw: ");

double amount = scanner.nextDouble();

if (amount > 0 && amount <= balance) {

balance -= amount;

System.out.printf("$%.2f has been withdrawn. Your new balance is: $%.2f\n", amount, balance);

} else if (amount > balance) {

System.out.println("Insufficient funds. Please try a smaller amount.");

} else {

System.out.println("Invalid withdrawal amount. Please enter a positive amount.");

}

}

public static void main(String[] args) {

ATM atm = new ATM();

atm.start();

}

}